2004 303(d) LIST OF WATERS FOR KENTUCKY

Environmental and Public Protection Cabinet Kentucky Division of Water

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2004 303(d) LIST OF WATERS FOR KENTUCKY

DIVISION OF WATER

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This report has been approved for release:

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SECTION 1 - NARRATIVE

Section 1.1 PREFACE

The Kentucky Division of Water (DOW) is required to review, modify as necessary, and submit the Clean Water Act (CWA) Section 303(d) list to the U.S. Environmental Protection Agency (USEPA) as required by 40 CFR 130.7(b)(4).

This document presents the additions, deletions, and modifications to the 2002 Kentucky 303(d) list and recommendations for Total Maximum Daily Load (TMDL) development.

Section 1.2 BACKGROUND

CWA Section 303(d) requires states to identify waters that do not meet applicable water quality standards after the application of technology based controls. As defined in the CWA and federal regulations, water quality standards include the designated uses of a water body, the adopted water quality criteria and an antidegradation policy. As defined in Kentucky Regulations, water quality standards are beneficial uses to be made of a waterbody and the established water quality objectives.

The section 303(d) list must include a description of the pollutants causing the violation of the water quality standards (40 CFR 130.7(b)(iii)(4) and a priority ranking of the water quality limited segments, taking into account the severity of the pollution and the uses to be made of the waters. A TMDL is the sum of the individual wasteload allocations for point sources, load allocations for nonpoint sources and natural background. Federal regulation defines a "water quality limited segment" as "any segment [of a water body] where it is known that water quality does not meet applicable water quality standards, and/or is not expected to meet applicable water quality standards, even after application of technology-based effluent limitations required by CWA section 301(b) or 306.

States are required to review the section 303(d) list in even-numbered years, make changes as necessary and submit the list to USEPA for approval.

Section 1.3 PUBLIC REVIEW AND PARTICIPATION

A draft copy of this report was submitted to the U.S. Environmental Protection Agency (EPA) and released for 45-day public comment on March 5, 2004. The press release indicated that the report could be viewed on the DOW web page or that a printed copy of the report could be obtained by contacting the DOW. Comments received by close of business April 19, 2004 will receive a formal response.

Section 1.4 INTRODUCTION

Kentucky adopted the Watershed Management Framework as a comprehensive means of monitoring to determine use support, assessments, TMDL development, and eventual remediation. The initial 5-year watershed cycle, begun in 1997, focused heavily on assessment monitoring. The objective was to increase the spatial extent of water quality assessment throughout the state. Monitoring in the watershed management units progressed as follows:

Kentucky River Unit	April 1998 to March 1999
Salt/Licking River Unit	April 1999 to March 2000
Tennessee/Mississippi/Cumberland River Unit	April 2000 to March 2001
Green/Tradewater River Unit	April 2001 to March 2002
Big and Little Sandy/Tygarts Unit	April 2002 to March 2003

Environmental monitoring for the first five-year watershed cycle was completed in 2002 with work in the Big Sandy/Little Sandy/Tygarts basin management unit. The first cycle of monitoring focused on obtaining, for the first time, a snapshot of conditions of Kentucky's waters, especially wadeable streams. Most local, state, and federal agencies in Kentucky with monitoring responsibilities cooperated in the watershed monitoring program. Some agencies simply provided their data and carried on monitoring as usual. For other agencies, sampling programs and sometimes even sampling methods were revised for best fit with the watershed monitoring plan.

The Kentucky Division of Water (DOW) has much of the responsibility for monitoring Kentucky's waters. Monitoring programs include:

- 1) biological, water quality, and bacteriological sampling at 70 long-term sites statewide;
- 2) water quality and bacteriological monitoring at rotating watershed locations;
- 3) a reference reach biological program to determine least-impaired conditions;
- 4) nutrient and trophic status determination of publicly owned reservoirs;
- 5) fish tissue sampling;
- 6) a random, statistically based biological survey of wadeable streams;
- 7) monitoring of nonpoint pollution sources and results of best management practices implementation; and
- 8) monitoring for total maximum daily load (TMDL) development.

In the first five-year watershed cycle, the Kentucky Department of Fish and Wildlife Resources (KDFWR) district fisheries biologists sampled fish in nearly 500 fourth order streams on which little data previously existed. The U.S. Army Corps of Engineers (COE) monitored most of their large reservoirs and many inlet and outlet stream locations. The U.S. Forest Service (USFS) conducted biological monitoring in several streams in the Daniel Boone National Forest. Local governments of Louisville and Lexington, Kentucky's two largest cities, provided water quality, bacteriological, and biological data from their metropolitan areas. The Tennessee Valley Authority (TVA) continued to collect biological data from streams in the Tennessee River basin. Other contributing agencies included Kentucky State Nature Preserves Commission (KSNPC), U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey (USGS), and several state universities. The Ohio River Valley Water Sanitation Commission (ORSANCO) is responsible for all monitoring on the Ohio River mainstem and also has stations on the downstream reaches of several major tributaries.

Biological monitoring was done mostly in fourth order streams, and water quality monitoring was done primarily in fifth order and larger streams. Bacteriological monitoring was conducted at most water quality sampling locations and at numerous other sites by Section 319 grant contractors, Watershed Watch (WW) volunteers, and DOW as follow-up on streams with high bacteria levels indicated by WW data.

For the DOW, the primary utility of the data is for determination of designated use support as defined by the state's water quality standards regulations. Use support assessments were made for aquatic life, primary contact recreation (swimming), fish consumption, and domestic water supply. Often the stream segments were assessed for one use, especially aquatic life use or primary contact recreation use, but sometimes segments were assessed for two or more uses.

Assessments were performed on 348 sites in the Kentucky River basin unit, 297 in the Salt/Licking unit, 454 in the Cumberland/Tennessee/Mississippi unit, and 331 in the Green/ Tradewater unit. Although the data have been collected, assessments have not yet been completed for the Big Sandy/Little Sandy/Tygarts basin management unit. The numbers of assessments for the last unit is expected to be in the range of the first four. Results were presented in the 2000 and 2002 Kentucky Reports to Congress on Water Quality [305(b) reports].

As expected, the watershed monitoring detected numerous problems, but it also identified many waters of high quality. Most impaired waters are placed on 303(d) lists for TMDL development. Impaired waters from the first three basin management units were placed on Kentucky's 2002 303(d) list, which was approved by Region 4 EPA on April 15, 2003. There were 949 waterbody/pollutant combinations on Kentucky's 2002 303(d) list.

Results of the intensive watershed monitoring were reported in the 2000 305(b) report for the Kentucky River unit and in the 2002 305(b) report for the Salt/Licking and Tennessee/Mississippi/Cumberland units. The 2002 303(d) report contained these results and older (pre-watershed framework) assessments from the last two watershed units. The second five-year monitoring cycle began in 2003, returning to the Kentucky River unit, this time focusing on TMDL development (see Section 1.7.2) instead of assessment monitoring.

Section 1.5 ASSESSMENT METHODOLOGY

Section 1.5.1 Streams and Rivers

Monitored data were derived from site-specific surveys and were generally no more than five years old. In some instances where conditions were believed to have remained mostly unchanged, monitored data collected prior to 1995 were still considered valid, and waters described by these data were categorized as monitored. There are few evaluated waters remaining in the assessment database. All efforts in the watershed initiative are to gather defensible, monitored data. However, there were some monitoring data more than five years old, strong anecdotal information, and extrapolation of discharge data that resulted in evaluated assessments.

Section 1.5.1.1 Aquatic Life Use Support

Water Quality Data. Chemical data collected by the DOW, MSD, and others were assessed according to EPA guidance (U.S. EPA 1997). Water quality data were compared to criteria contained in Kentucky Water Quality Standards Regulations (401 KAR 5:031). The segment fully supported aquatic life use when criteria for dissolved oxygen, un-ionized ammonia, temperature, and pH were not met in 10 percent or less of the samples collected. Partial support was indicated if any one criterion for these parameters was not met in 11-25 percent of the samples. A segment was not supporting if any one of these criteria was not met more than 25 percent of the time.

Data for mercury, cadmium, copper, iron, lead, and zinc were analyzed for violations of acute and chronic criteria listed in state water quality standards regulations. The segment fully supported WAH use if all criteria were met at stations with quarterly or less frequent sampling or if only one violation occurred at stations with monthly sampling. Partial support was indicated if any one criterion was not met more than once but in less than 10 percent of the samples. The segment was not supporting if criteria were exceeded in greater than 10 percent of the samples. The assessment criteria are closely linked to the way state and federal water quality criteria were developed. Aquatic life are considered to be protected if, on the average, the acute criteria are not exceeded more than once every three years.

Biological Data. Several community structure function metrics were analyzed for each assemblage (algae, macroinvertebrates, and fish). As outlined in Table 1-1 below, the metric scores were used to determine biotic integrity and aquatic life use support for each stream reach monitored. Expectations for metric values are dependent on stream size, ecoregion, and habitat quality. Bioassessments integrate data from the biological community, habitat, physical environment, water quality, and professional judgment of aquatic biologists.

Biological data sometimes were judged to be indeterminate. This occurred on several occasions in the Salt/Licking unit in 1999 when only one assemblage (usually fish, the assemblage probably most affected by the drought) was sampled during the extreme drought conditions of that year. On other occasions the data were considered inadequate or the results borderline, and it was felt that re-sampling would be more appropriate than making a use support decision with existing data. These streams will be sampled again in the next watershed cycle.

Table 1-1. Biological Criteria for Assessment of Warm Water Aquatic Habitat Use Support ^a				
Assemblage	Fully Supporting	Partially Supporting	Not Supporting	
Algae	Diatom Bioassessment Index (DBI) Classification of excellent or good, biomass similar to reference/control or STORET mean.	increased biomass (if	DBI classification of poor, biomass very low (toxicity), or high (organic enrichment).	
Macroinvertebrate	Macroinvertebrate Bioassessment Index (MBI) excellent or good, high EPT, sensitive species present.	1	MBI classification of poor, EPT low, TNI of tolerant taxa very high. Most functional groups missing from community.	
Fish	Index of Biotic Integrity (IBI) excellent or good, presence of rare, endangered or species of special concern.	IBI fair.	IBI poor, very poor, or no fish.	

^a Acronyms used in this table are: EPT = Ephemeroptera, Plecoptera, Trichoptera; RA = Relative Abundance; TNI = Total Number of Individuals

Federally Threatened and Endangered Species. Waters with federally threatened or endangered species in November 1975 have an existing "use" of Outstanding State Resource Water, and the loss or significant decline of one of these populations constitutes a use impairment.

Section 1.5.1.2 Primary Contact Recreation (Swimming) Use Support

Fecal coliform and pH data were used to indicate the degree of support for swimming use. The use was fully supported if the fecal coliform bacteria criterion of 400 colonies per milliliter was not met in less than 20 percent of the samples, partially supported if the criterion was not met in 20-33 percent of the samples, and not supported if the criterion was not met in more than 33 percent of the samples. Streams with pH less than 6.0 or greater than 9.0 units in more than 10 percent of the samples were considered to not support swimming use.

Section 1.5.1.3 Fish Consumption Use Support

Fish consumption is a category that, in conjunction with aquatic life use, assesses attainment of the fishable goal of the Clean Water Act. Assessment of the fishable goal was separated into these two

categories in 1992 because a fish consumption advisory does not preclude attainment of the aquatic life use and vice versa. Separating fish consumption and aquatic life use support gives a clearer picture of actual water quality conditions.

Kentucky revised its methodology for issuing fish consumption advisories in 1998 to a risk-based approach patterned after the Great Lakes Initiative. The risk-based approach generally is more conservative than the Food and Drug Administration (FDA) action levels that were used previously. For example, the FDA action level for mercury is 1.0 ppm but the risk-based number for issuing an advisory is as low as 0.12 ppm.

As a result of this change in methodology, a statewide advisory was issued in April 2000 for children under six and women of childbearing age to not consume more than one meal a week of any fish from Kentucky waters because of mercury. However, EPA (2001a) issued a draft mercury water quality criterion expressed as a methylmercury concentration in fish tissue of 0.3 ppm. Therefore, for purposes of 305(b) and 303(d) reporting, waters were not considered impaired unless fish exhibited mercury tissue concentrations of at least 0.3 ppm. In other words, the fish tissue concentration triggering the statewide advisory (0.12 ppm) was considered more stringent than water quality standards.

Other than the statewide advisory for mercury explained above, the following criteria were used to assess support for the fish consumption use:

- Fully supporting no fish advisories or bans in effect
- Partially supporting "restricted consumption" fish advisory or ban in effect for general population or a subpopulation that potentially could be at a greater cancer risk (e.g. pregnant women, children). Restricted consumption is defined as limits on the number of meals consumed per unit time for one or more fish species
- Not supporting "no consumption" fish advisory or ban in effect for general
 population or a subpopulation that potentially could be at greater risk, for one or
 more fish species, or a commercial fishing ban in effect

Section 1.5.1.4 Drinking Water Use Support

Drinking water use support was determined in several ways. First, compliance with maximum contaminant levels (MCLs) in finished water was determined by the annual average of quarterly samples. Drinking water use assessments in reservoirs were supplemented by surveys of drinking water operators on any taste and odor problems and use of biocides. The routine application of a biocide or use of carbon filtration were reasons for assessing a water as not fully supporting the domestic water supply use. Instream water quality data generally were not available to assess drinking water use.

Section 1.5.2 Lakes and Reservoirs

Section 1.5.2.1 Introduction

Since the initiation of the rotating basin approach in 1998, the state's significant publicly owned reservoirs are monitored over a five-year cycle instead of the previous seven- to eight-year cycle. During this two-year reporting period, 31 reservoirs in the Green and Tradewater river basins and 8 reservoirs in the Big Sandy, Little Sandy, and Tygarts river basins were monitored for trophic state and use support. Most of the natural lakes in the state are shallow floodplain lakes and are found in the Mississippi River Basin.

Designated uses in lakes consist of Warm Water Aquatic Habitat (WAH) (sometimes in conjunction with Cold Water Aquatic Habitat [CAH] in lakes with a two-story fishery) and Primary and Secondary Contact Recreation (PCR and SCR). Many of the reservoirs also have a Domestic Water Supply (DWS) use.

Section 1.5.2.2 Methods

Sampling was conducted seasonally three times during the growing season, typically in late April to early May, July, and late September to early October. Composite nutrient and chlorophyll *a* samples were collected from the photic zone (surface to one percent of light penetration), and dissolved oxygen, temperature, pH, and specific conductivity measurements were obtained from profiles of the water column in the deepest part of the lake. Samples were taken in the area immediately upstream of the dam and at other locations on the main lake and major tributary embayments depending on the size and configuration of each reservoir. Trophic data also were provided by the U.S. Army Corps of Engineers on reservoirs in the Green and Tradewater river basins for the period 2001 – 2002.

Section 1.5.2.3 Assessment of Trophic State and Use Support

Trophic status was assessed in lakes by using the Carlson Trophic State Index (TSI) for chlorophyll *a*. This method is convenient because it allows lakes to be ranked numerically according to increasing eutrophy, and it also provides for a distinction between oligotrophic, mesotrophic, eutrophic, and hypereutrophic lakes. The growing season (April – October) averaged TSI value was used to rank each lake. Areas of lakes that exhibited trophic gradients or embayment differences often were analyzed separately. Use support in lakes was determined by criteria listed in Table 1-2.

Section 1.5.3 Causes and Sources

Causes and sources are categorized by codes given in national guidance. Causes for primary contact recreation, fish consumption, and water supply usually were easily identified. However, most waters not supporting aquatic life use were identified by biological monitoring, and causes were determined by the observations and judgment of the field biologists. All causes may not be evident in the field, and there may be other causes contributing to use impairment that are not listed. Sources of all types of use impairments are even more difficult to determine and should be considered as "probable" sources at the 305(b) stage. Sources are more fully identified once the impaired waters are 303(d)-listed, TMDL sampling is conducted, and a more comprehensive look is taken at activities and land uses within the watershed.

Table 1-2. C	riteria for Assessing Use Suppor	t in Lakes and Reservoirs	
<u>Category</u> Not Supporting:	Warm Water Aquatic Habitat (At least two of the following criteria)	Secondary Contact Water Recreation	Domestic Water Supply (At least one of the following criteria)
	Fish kills caused by poor water quality	Widespread excess macrophyte/macro- scopic algal growth	Chronic taste and odor complaints caused by algae
	Severe hypolimnetic oxygen depletion	Chronic nuisance algal blooms	Chronic treatment problems caused by poor water quality
	Dissolved oxygen average less than 4 mg/l in the epilimnion		Exceeds drinking water MCL
Partially Supporting: (At least one of the following criteria)	Dissolved oxygen average less than 5 mg/l in the epilimnion	Localized or seasonally excessive macrophyte/macroscopic algal growth	Occasional taste and odor complaints caused by algae
,	Severe hypolimnetic oxygen depletion	Occasional nuisance algal blooms	Occasional treatment problems caused by poor water quality
	Other specific cause (i.e. low pH)	High suspended sediment concentrations during the recreation season	
Fully Supporting:	None of the above	None of the above	None of the above

Section 1.5.4 Impaired Waters Not Requiring TMDLs

Stream segments immediately downstream from dischargers in significant noncompliance with their permit limits may be shown as impaired in 305(b) reports. These determinations are based on best professional judgement, taking several factors such as discharge and receiving stream attributes into consideration. In these cases, no in-stream data exist to confirm that impairments exist. The assumed impairments are permit compliance issues and do not require development of TMDLs because adequate TMDLs (discharge permit limits) are already in place. Other instances of impaired waters not requiring TMDLs are when the causes are considered pollution, not pollutants, such as flow alternations below major reservoirs.

Section 1.6 LISTING METHODOLOGY

The approved 2002 303(d) lists were the starting point for the 2004 303(d) lists. Assessment information from recent watershed monitoring in the Tradewater/Green River Unit, which was contained in the 2003 305(b) electronic data submittal to EPA in April 2003, is included in this 2004 303(d) report. Assessments from the fifth and last watershed management unit, the Big Sandy/Little Sandy/Tygarts, were not yet available for this 303(d) report, although they will be included in the 2004 305(b) report. Some new information is also available from ORSANCO on the Ohio River main stem and is included in this report.

A monitoring meeting was held several months prior to the initiation of data collection in each watershed management unit. These meetings were designed to bring institutional groups together that were or could potentially be involved in data collection efforts within the watershed unit. It was also designed to make these groups aware of the DOW's regulatory obligations. In this manner, all of the parties were aware of data collection and monitoring efforts throughout that watershed unit. The information was subsequently compiled for 305(b) assessment and reporting and 303(d) reporting purposes.

The 305(b) Reports use all available information on stream and lake water quality that has reliable quality assurance and quality control. Citizen data were used as a screening tool to define stream segments that may have potential water quality problems. However, the DOW did not use citizen data independently for listing and assessment purposes. As resources allowed, additional monitoring was done by DOW on those stream segments that had priority with the WW groups and the highest potential for water quality problems. It is anticipated that volunteer data with the proper QA/QC will be used directly in use assessments in the near future.

Stream segments identified as being in nonsupport of one or more designated uses are classified as 1st Priority in this 303(d) Report. Stream segments identified as being in partial support of one or more designated uses (but not nonsupport of any use) are classified as 2nd Priority in this 303(d) Report. Waters with federally threatened or endangered species in November 1975 have an existing use of Outstanding Resource Water, and the loss or significant decline of one of these populations constitutes a use impairment. Stream segments in this category are listed as 1st Priority. Waters were further prioritized based on the use impairment and extent of public concern.

Section 1.7 TMDL DEVELOPMENT

Section 1.7.1 Progress in Delisting Waters and Developing TMDLs

Kentucky has approved delistings for 105 waterbody/pollutant combinations and delisting requests for another 57 combinations in this report. With those delistings, and combined with the number of approved TMDLs, Kentucky is slightly ahead of the TMDL development schedule that has been agreed to by Kentucky and EPA Region 4. According to that schedule, Kentucky is to develop 19 TMDLs in 2003 and 22 TMDLs in 2004, for a total of 41 TMDLs. Kentucky also has a significant number (57) of TMDLs currently under development.

Kentucky, like other states, is on a schedule to complete TMDLs for 303(d)-listed waters in the next 10 - 15 years. To assist in completing this significant workload, EPA has provided additional Section 106 and 319(h) funds that has allowed DOW to hire several new personnel and continue contracting of TMDL development.

Section 1.7.2 Priority Watersheds for TMDL Development

Monitoring in the Second Five-Year Watershed Cycle. Whereas the purpose of the monitoring in the first watershed cycle was to obtain baseline data statewide, monitoring in the second cycle is focusing on impaired watersheds. This work began in 2003 in the Kentucky River Basin. Impaired streams were selected by agreeing on certain priority watersheds identified by the Watershed Steering Committee.

The work will be carried out as described below:

- 1. Select watersheds with predominantly first priority biological impairments in the watershed management unit.
- 2. Identify preliminary sampling locations for rapid biological assessment using existing biological and habitat data with GIS coverages, particularly in subwatersheds suspected of contributing most significantly to impairment.
- 3. Review and discuss general sampling locations.
- 4. Review regulatory data and compliance information for KPDES, Surface Mining, Forestry, and other data (concurrently with Step 5).
- 5. Drive the watershed to evaluate site representativeness, access and safety.
- 6. Select and obtain GPS coordinates for final sampling locations.
- 7. Collect habitat and rapid biological assessment data (as early as mid-March May 2004).
- 8. Identify sites where chemical quality data are to be collected based on the reconnaissance and rapid biological assessment information.
- 9. Have an outside review of the chemical sampling design.
- 10. Collect chemical water quality and flow data at the selected locations for one year.
- 11. Develop TMDLs for impaired watersheds.

Kentucky River Basin Management Unit. Eight watersheds were chosen for monitoring in 2003 to support TMDL development. Numerous sites were sampled biologically and for water quality in the Benson Creek, Boone Creek, Hickman Creek, Lower Howard Creek, McConnell Run, Potter Fork, Swift Camp Creek, and Tate Creek watersheds (see pp. 65 to 71 in the "TMDLs Under Development- Kentucky River Basin Unit").

Salt/Licking River Basin Management Unit. Ten impaired waterbodies in the Salt/Licking river basins, comprising 44 waterbody/pollutant combinations, have been tentatively selected for TMDL monitoring in 2004 (Table 1-3). Most had one or more of the following pollutants listed as the cause of impairment: nutrients, organic enrichment/low dissolved oxygen, siltation, pathogens, and flow and habitat alterations. Additional waters where data collection and water quality modeling are currently being done have also been targeted for TMDL development (see table below) and comprise five impaired waterbodies and 17 waterbody/pollutant combinations. Because most of the impaired watersheds were determined by means of biological monitoring (some in combination with bacteriological monitoring) in the downstream reaches of fourth order watersheds, it is necessary to conduct further biological and water quality studies in upstream sub-watersheds to determine sources (and possibly additional causes) of the impaired use. Biological work is done by EPA's Rapid Bioassessment Protocols.

The biological screening work will be conducted once in 2004 and will take place from approximately mid-March through May 2004 because many of the streams to be sampled will be small (first, second, and third order) and may be dry by mid-summer. Water quality sampling will follow the biological work and can begin as soon as appropriate water quality sampling locations have been identified. This monitoring will be conducted once per month for 11 months in 2004-2005.

Table 1-3. Waters Proposed for Data Collection in Salt/Licking River Basin Unit, 2004-05				
Stream Segment	River Miles	Pollutants of Concern		
		Nutrients, Siltation, OE/Low DO,		
Strodes Cr of Stoner Cr	2.7 to 19.3	Pathogens		
Hinkston Cr of S Fk Licking River	51.5 to 65.9	Nutrients, Siltation, OE/Low DO		
		Siltation, Habitat Alterations, Flow		
Elk Fork of Licking River	0.0 to 4.9	Alterations		
		Siltation, Turbidity, Habitat Alterations,		
Elk Fork of Licking River	4.9 to 10.5	Flow Alterations		
		Siltation, Turbidity, Habitat Alterations,		
Elk Fork of Licking River	12.6 to 14.7	Flow Alterations		
		Nutrients, OE/Low DO, Ammonia,		
Fern Cr/Northern Ditch of Pond Cr	0.0 to 7.5	Pathogens		
Fern Cr/Northern Ditch of Pond Cr	7.5 to 12.8	Nutrients, OE/Low DO, Pathogens		
(Blue) Spring Ditch of N. Ditch	0.0 to 2.7	Pathogens		
		Nutrients, Siltation, OE/Low DO, Habitat		
Woolper Cr of Ohio River		Alterations, Pathogens		
Allen Fork of Woolper Creek	2.0 to 4.6	Nutrients, Siltation, Habitat Alterations		
		Nutrients, Siltation, OE/Low DO,		
Sinking Cr of Ohio River	8.9 to 15.6	Pathogens		
Hardins Cr of Sinking Creek	0.0 to 5.0	Nutrients, Siltation, OE/Low DO		
Hardy Creek of Little KY River	0.0 to 1.4	Nutrients, OE/Low DO, Habitat Alterations		
		Organic Enrichment/Low DO (OE/low		
Beargrass Creek	0.0 to 1.5	DO), Pathogens*		
Middle Fork Beargrass Creek	0.0 to 2.3	OE/Low DO, Pathogens		
Middle Fork Beargrass Creek	2.3 to 15.2	Pathogens		
South Fork Beargrass Creek	0.0 to 14.6	OE/Low DO, Pathogens		
Muddy Fork of Beargrass Creek	0.0 to 6.9	Pathogens		
_		Nutrients, Siltation, OE/low DO, Pathogens,		
Banklick Creek of Licking River	0-8.2	Habitat Alterations		
		Nutrients, OE/low DO, Pathogens, Habitat		
Banklick Creek of Licking River	8.2-19.0	Alterations		

DOW will conduct this monitoring except for the following: Banklick Creek watershed water quality monitoring will be performed by Northern Kentucky Sanitation District Number 1; Beargrass Creek watershed monitoring will be performed by Louisville MSD. DOW is discussing working cooperatively on the Fern Creek/Northern Ditch and Spring Ditch monitoring with MSD.

Section 1.8 SUMMARY

Kentucky is currently producing TMDLs in accordance with the schedule agreed to by EPA and Kentucky. However, Kentucky will need to significantly increase the capacity for developing TMDLs in the very near future by developing internal capability and mechanisms to fund contractors.

SECTION 2 – 303(d) Lists

A master list of 303(d) waters, giving only the stream name and current status and sorted alphabetically, is presented in Table 2-1. A similar table for lakes and reservoirs is given in Table 2-2. This is followed by subchapters, arranged by river basin management unit, with more detail of approved delistings, delisting requests, approved TMDLs, TMDLs under development and, finally, the 2004 list of waters. The latter includes those impaired waters with delisting requests and TMDLs already approved and under development. Waters with approved delistings are not contained in the 2004 list. Stream segments determined to be impaired but not requiring TMDLs follow each basin unit's listed waters.

Table 2-1. Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

<u>Note:</u> In the 303(d) listings, there may be multiple 303(d)-listed streams for any entry shown here. This occurs if the different stream segments are in the same county, have the same priority status, but have different pollutants of concern. The number in parentheses under 'Status' denotes the number of pollutants of concern. If no number is indicated, one pollutant is assumed.

River Name	County	Status	Watershed Unit
Adams Fork of Rough River	Ohio	2 nd Priority	Green/Tradewater
Allen Fork of Woolper Creek	Boone	2 nd Priority	Salt/Licking
Allison Creek of Fleming Creek	Fleming	TMDL Approved (1)	Salt/Licking
Allison Creek of Fleming Creek	Fleming	TMDL Under Development (2)	Salt/Licking
Angle Creek of Little Cypress Creek	Marshall	1 st Priority	TN/MS/Cumberland
Arnolds Creek of Ten Mile Creek	Grant	2 nd Priority	Kentucky
Bacon Creek of Nolin River	Hart/Larue	1 st Priority (2)	Green/Tradewater
Bailey Creek of Clover Fork	Harlan	TMDL Approved	TN/MS/Cumberland
Balls Fork of Troublesome Creek	Knott	1 st Priority	Kentucky
Banklick Creek of Licking River	Kenton	1 st Priority (5)	Salt/Licking
Banta's Fork of Salt River of Six Mile Creek	Henry	2 nd Priority (2)	Kentucky
Barren River of Green River	Allan/Monroe	1 st Priority	Green/Tradewater
Barren River of Green River	Warren	Delisted (1)	Green/Tradewater
Barren River of Green River	Warren	Delisting Requested (1)	Green/Tradewater
Bat East Creek of Pond Creek	Muhlenberg	2 nd Priority	Green/Tradewater
Baughman Fork of Boone Creek	Fayette	TMDL Under Development (2)	Kentucky
Bayou Creek of Ohio River	Livingston	1 st Priority (3)	Green/Tradewater
Bayou Creek of Ohio River	McCracken	1 st Priority (3)-Delisting	TN/MS/Cumberland
•		Requested (2)	
Bayou de Chien of Mississippi River	Graves/Hickman	1 st Priority	TN/MS/Cumberland
Bear Creek of Green River	Edmonson	1 st Priority	Green/Tradewater
Bear Creek of Green River	Grayson	2 nd Priority	Green/Tradewater

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Bear Creek of South Fork Cumberland River	McCreary	1 st Priority	TN/MS/Cumberland
Bear Creek of Tennessee River (Kentucky Lake)	Marshall	1 st Priority	TN/MS/Cumberland
Bear Run of Clover Creek	Breckinridge	1 st Priority	Green/Tradewater
Beargrass Creek of Ohio River	Jefferson	1 st Priority (2)	Salt/Licking
Beaver Creek of Levisa Fork	Floyd	1 st Priority (2)	Tygarts/Sandy
Beaver Creek of Licking River	Menifee	2 nd Priority	Salt/Licking
Becks Creek of Jellico Creek	Whitley	1 st Priority	TN/MS/Cumberland
Bee Creek of Clarks River	Calloway	1 st Priority	TN/MS/Cumberland
Beech Creek of Pond Creek	Muhlenburg	TMDL Under Development (1)	Green/Tradewater
Beech Fork of Rolling Fork	Nelson/Washington	2 nd Priority	Salt/Licking
Beechy Creek of Blood River	Calloway	Delisted	TN/MS/Cumberland
Bennetts Fork of Yellow Creek Bypass	Bell	2 nd Priority	TN/MS/Cumberland
Benson Creek of Kentucky River	Franklin	TMDL Under Development (2)	Kentucky
Big Bone Creek of Ohio River	Boone	2 nd Priority (4)	Salt/Licking
Big Caney Creek of Quicksand Creek	Breathitt	2 nd Priority (4)	Kentucky
Big Creek of Russell Creek	Adair	1 st Priority (3)	Green/Tradewater
Big Indian Creek of Cumberland River	Knox	1 st Priority	TN/MS/Cumberland
Big Lily Creek of Cumberland River (Lake Cumberland)	Russell	Delisted	TN/MS/Cumberland
Big Pitman Creek of Green River	Taylor	2 nd Priority (4)	Green/Tradewater
Big Pitman Creek of Green River	Green	2 nd Priority (1)	Green/Tradewater
Big Reedy Creek of Green River	Butler/Edmonson	1 st Priority (3)	Green/Tradewater
Big Renox Creek of Cumberland River	Cumberland	2 nd Priority	TN/MS/Cumberland
Big Sandy River of Ohio River	Lawrence	2 nd Priority (2)	Big and Little Sandy/Tygarts
Big South Fork of Rolling Fork	Marion	1 st Priority	Salt/Licking
Big Twin Creek of Kentucky River	Owen	2 nd Priority (2)	Kentucky
Big Willard Creek of North Fork Kentucky River	Perry	1 st Priority (4)	Kentucky
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Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Billy Creek of Valley Creek	Hardin	1 st Priority (3)	Green/Tradewater
Blackford Creek of Ohio River	Daviess/Hancock	2 nd Priority	Green/Tradewater
Blacks Creek of Hinkston Creek	Bourbon	2 nd Priority (3)	Salt/Licking
Blizzard Pond of West Fork Clarks River	McCracken	1 st Priority	TN/MS/Cumberland
(Blue) Spring Ditch of Northern Ditch	Jefferson	1 st Priority (2)	Salt/Licking
Boone Creek of Hinkston Creek	Bourbon	2 nd Priority (2)	Salt/Licking
Boone Creek of Kentucky River	Fayette/Clark	TMDL Under Development (3)	Kentucky
Briary Creek of Buck Creek	Pulaski	2 nd Priority	TN/MS/Cumberland
Brier Creek of Pond River	Muhlenburg	TMDL Approved (1)	Green/Tradewater
Brooks Run of Floyds Fork	Bullitt	TMDL Under Development (3) 1 st Priority (page 118)	Salt/Licking
Brush Creek of Cumberland River	Knox	1 st Priority (3)	TN/MS/Cumberland
Brush Creek of Green River	Casey	2 nd Priority	Green/Tradewater
Brush Creek of Obion Creek	Graves	2 nd Priority	TN/MS/Cumberland
Brush Creek of Obion Creek	Hickman	2 nd Priority (4)	TN/MS/Cumberland
Brush Creek of Red River	Powell	2 nd Priority	Kentucky
Brush Creek of Roundstone Creek	Rockcastle	1 st Priority	TN/MS/Cumberland
Brush Creek of Twelve Mile Creek	Campbell	1 st Priority (Remediation Underway)	Salt/Licking
Brush Fork of Long Falls Creek	McLean/Daviess	1 st Priority (3)	Green/Tradewater
Buck Creek of Buck Fork of Pond River	Christian	2 nd Priority (2)	Green/Tradewater
Buck Creek of Clear Fork	Whitley	Delisted (3)	TN/MS/Cumberland
Buck Creek of Cumberland River	Pulaski	1 st Priority	TN/MS/Cumberland
Buck Creek of Green River	McLean	1 st Priority (3)	Green/Tradewater
Buck Fork of Pond River	Christian/Todd	1 st Priority (3)	Green/Tradewater

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Buck Run of Eagle Creek	Owen	1 st Priority	Kentucky
Buckhorn Creek of Rolling Fork	Marion	Delisted	Salt/Licking
Buckhorn Creek of Troublesome Creek	Breathitt	1 st Priority (5)	Kentucky
Bucks Branch of Jellico Creek	Whitley/McCreary	Delisting Requested	TN/MS/Cumberland
Buffalo Creek of Tradewater River	Hopkins	2 nd Priority (5)	Green/Tradewater
Bull Creek of Collins Fork	Knox	2 nd Priority	Kentucky
Bull Creek of Slover Creek	Webster	2 nd Priority (3)	Green/Tradewater
Bullitt Lick Creek of Salt River	Bullitt	2 nd Priority	Salt/Licking
Burnett Fork of North Fork Panther Creek	Daviess	2 nd Priority (3)	Green/Tradewater
Burning Fork of Licking River	Magoffin	1 st Priority	Salt/Licking
Butchers Branch of Blackford Creek	Hancock	TMDL Under Development	Green/Tradewater
Butler Fork of Russell Creek	Adair	1 st Priority (3)	Green/Tradewater
Cabin Creek of Ohio River	Mason/Lewis	1 st Priority (2)	Salt/Licking
Caldwell Creek of Terrapin Creek	Graves	1 st Priority (3)	TN/MS/Cumberland
Calhoun Creek of Green River	Casey	2 nd Priority (2)	Green/Tradewater
Camp Creek of West Fork Clarks River	McCracken	2 nd Priority (2)	TN/MS/Cumberland
Cane Branch of Middle Fork (Beaver Creek)	McCreary	TMDL Under Development	TN/MS/Cumberland
Cane Creek of Bayou de Chien	Hickman	1 st Priority (3)	TN/MS/Cumberland
Cane Creek of North Fork Kentucky River	Breathitt	TMDL Approved	Kentucky
Cane Creek of Red River	Powell	1 st Priority	Kentucky
Cane Creek of Shawnee Creek	Ballard	2 nd Priority	TN/MS/Cumberland
Cane Run of Caney Creek	Hopkins	TMDL Approved	Green/Tradewater
Cane Run of North Elkhorn Creek	Scott/Fayette	TMDL Under Development (1)	Kentucky
Cane Run of North Elkhorn Creek	Scott	1 st Priority (2)	Kentucky
Cane Run of South Fork Panther Creek	Daviess	2 nd Priority (4)	Green/Tradewater
Caney Creek of Donaldson Creek	Caldwell	1 st Priority (2)	Green/Tradewater

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Caney Creek of Licking River Caney Creek of Pond Creek	Morgan Muhlenburg	2 nd Priority (3) 1 st Priority (4)	Salt/Licking Green/Tradewater
Caney Creek of Tradewater River Caney Fork of Craborchard Creek Carr Fork of North Kentucky River Carr Fork of North Kentucky River Cartwright Creek of Beech Fork	Hopkins Webster Perry Perry Washington	1 st Priority (4) 2 nd Priority (4) TMDL Approved 2 nd Priority 2 nd Priority (6)	Green/Tradewater Green/Tradewater Kentucky Kentucky Salt/Licking
Casey Creek of Green River Casey Creek of Highland Creek Casey Creek of Little River Cash Creek of Green River Cassidy Creek of Fleming Creek	Adair Union Trigg Henderson Fleming	2 nd Priority 1 st Priority (2) 2 nd Priority 2 nd Priority TMDL Approved	Green/Tradewater Green/Tradewater TN/MS/Cumberland Green/Tradewater Salt/Licking
Castleberry Creek of Tradewater River Catron Creek of Martins Fork Cedar Creek of Floyds Fork Cedar Creek of Kentucky River	Christian Harlan Jefferson/Bullitt Owen	2 nd Priority (5) TMDL Approved Delisted 2 nd Priority (3)	Green/Tradewater TN/MS/Cumberland Salt/Licking Kentucky
Central Creek of Truman Creek Central Creek of Truman Creek Champion Creek of Island Creek Chaplain River of Beech Fork Chenoweth Run of Floyds Fork	Carlisle Carlisle McCracken Mercer Jefferson	Delisted (1) 1 st Priority (1) 1 st Priority 1 st Priority TMDL Approved (1)	TN/MS/Cumberland TN/MS/Cumberland TN/MS/Cumberland Salt/Licking Salt/Licking

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Chenoweth Run of Floyds Fork	Jefferson	1 st Priority	Salt/Licking
Chestnut Creek of Clarks River	Marshall	2 nd Priority (2)	TN/MS/Cumberland
Christy Creek of Triplett Creek	Rowan	2 nd Priority	Salt/Licking
Clanton Creek of Humphrey Creek	Ballard	1 st Priority (4)	TN/MS/Cumberland
Clarks River of Tennessee River	McCracken	2 nd Priority	TN/MS/Cumberland
Clarks River of Tennessee River	Calloway	Delisted (4)	TN/MS/Cumberland
Clarks River of Tennessee River	Calloway	1 st Priority (4)	TN/MS/Cumberland
Clarks River of Tennessee River	Calloway	2 nd Priority	TN/MS/Cumberland
Clarks Run of Dix River	Boyle	1 st Priority (2)	Kentucky
Clarks Run of Dix River	Boyle	2 nd Priority	Kentucky
Claylick Creek of Cumberland River	Crittenden/Livingston	1 st Priority	TN/MS/Cumberland
Claylick Creek of Green River	Warren	1 st Priority (3)	Green/Tradewater
Claylick Creek of South Fork Little Barren River	Metcalfe	2 nd Priority (3)	Green/Tradewater
Clayton Creek of Clarks River	Calloway	1 st Priority	TN/MS/Cumberland
Clayton Creek of Clarks River	Calloway	2 nd Priority	TN/MS/Cumberland
Clear Creek of Bullskin Creek	Shelby	1 st Priority	Salt/Licking
Clear Creek of Rolling Fork	Hardin	1 st Priority	Salt/Licking
Clear Creek of Tradewater River	Hopkins	1 st Priority	Green/Tradewater
Clover Creek of Ohio River	Breckinridge	2 nd Priority (2)	Green/Tradewater
Clover Fork of Cumberland River	Harlan	TMDL Approved (1)	TN/MS/Cumberland
Clover Fork of Cumberland River	Harlan	1 st Priority	TN/MS/Cumberland
Cloverlick Creek of Poor Fork	Harlan	TMDL Approved (1)	TN/MS/Cumberland
Cloverlick Creek of Poor Fork	Harlan	1 st Priority (3)	TN/MS/Cumberland
Collins Fork of Goose Creek	Clay	2 nd Priority	Kentucky
Cooley Creek of Mayfield Creek	Graves	1 st Priority	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Cooper Run of Stoner Creek	Bourbon	1 st Priority (2)	Salt/Licking
Cope Fork of Frozen Creek	Breathitt	2 nd Priority (3)	Kentucky
Copper Creek of Dix River	Lincoln/Rockcastle	Delisted (partial-1)	Kentucky
Copper Creek of Dix River	Lincoln/Rockcastle	2 nd Priority	Kentucky
Copper Creek of Richland Creek	Hopkins	1 st Priority (3)	Green/Tradewater
Copperas Creek of Cany Creek	Hopkins	1 st Priority (3)	Green/Tradewater
Copperas Fork of Cooper Creek	McCreary	TMDL Under Development	TN/MS/Cumberland
Cox Creek of Salt River	Nelson/Bullitt	2 nd Priority (2)	Salt/Licking
Cox's Run of Nolin River	Hardin/Larue	2 nd Priority (3)	Green/Tradewater
Craborchard Creek of Drakes Creek	Hopkins	TMDL Approved	Green/Tradewater
Craborchard Creek of Drakes Creek	Hopkins	1 st Priority (3) TMDL Approved(1)	Green/Tradewater
Craborchard Creek of Tradewater River	Webster	1 st Priority	Green/Tradewater
Craintown Branch of Fleming Creek	Fleming	TMDL Approved (1)	Salt Licking
Craintown Branch of Fleming Creek	Fleming	TMDL Under Development (2)	Salt/Licking
Cranks Creek of Martins Fork	Harlan	TMDL Not Required	TN/MS/Cumberland
Crocus Creek of Cumberland River	Cumberland/Adair	2 nd Priority (2)	TN/MS/Cumberland
Crooked Creek of Licking River	Nicholas	1 st Priority	Salt/Licking
Crooked Creek of Ohio River	Crittenden	1 st Priority	Green/Tradewater
Crooked Creek of Ohio River	Crittenden	2 nd Priority	Green/Tradewater
Crooked Creek of Panther Creek	Daviess	1 st Priority	Green/Tradewater
Crooked Creek of Rolling Fork	Bullitt	1 st Priority	Salt/Licking
Crooked Creek of Roundstone Creek	Rockcastle	2 nd Priority	TN/MS/Cumberland
Cumberland River of Ohio River	Bell	TMDL Approved (1)	TN/MS/Cumberland
Cumberland River of Ohio River	Bell	1 st Priority	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Cumberland River of Ohio River	Harlan	TMDL Approved (1)	TN/MS/Cumberland
Cumberland River of Ohio River	Harlan	2 nd Priority	TN/MS/Cumberland
Curry's Fork of Floyds Fork	Oldham	1 st Priority (5)	Salt/Licking
Cypress Creek of Pond River	Muhlenburg	TMDL Under Development	Green/Tradewater
Cypress Creek of Pond River	Muhlenburg	2 nd Priority-TMDL Under Development	Green/Tradewater
Cypress Creek of Tennessee River	Marshall	1 st Priority (3)	TN/MS/Cumberland
Cypress Creek of Tradewater River	Union	1 st Priority	Green/Tradewater
Damon Creek of West Fork Clarks River	Calloway	1 st Priority (2)	TN/MS/Cumberland
Daniels Creek of Rock Lick Creek	Breckinridge	2 nd Priority	Green/Tradewater
Deer Creek of Green River	Webster	1 st Priority	Green/Tradewater
Deer Creek of Ohio River	Livingston/Crittenden	1 st Priority	Green/Tradewater
Deserter Creek of South Fork Panther Creek	Daviess	1 st Priority (4)	Green/Tradewater
Dix River of Kentucky River	Garrard	1 st Priority	Kentucky
Doe Run of Ohio River	Meade	1 st Priority	Salt/Licking
Donaldson Creek of Cumberland River	Trigg	2 nd Priority	TN/MS/Cumberland
Dorsey Run of Sinks of Nolin River	Hardin/Larue	1 st Priority (4)	Green/Tradewater
Doty Creek of Fleming Creek	Fleming	TMDL Approved (1)	Salt/Licking
Doty Creek of Fleming Creek	Fleming	1 st Priority-TMDL Under	Salt/Licking
		Development	
Drakes Creek of Barren River	Warren	2 nd Priority	Green/Tradewater
Drakes Creek of Pond River	Hopkins	Delisted (1)	Green/Tradewater
Drakes Creek of Pond River	Hopkins	Delisted (1)	Green/Tradewater
Drakes Creek of Pond River	Hopkins	TMDL Under Development	Green/Tradewater
Dry Creek of Casey Creek	Adair/Casey	2 nd Priority	Green/Tradewater
Dry Creek of Cumberland River (Lake Barkley)	Trigg	1st Priority	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Dry Creek of Eddy Creek	Caldwell	2 nd Priority	TN/MS/Cumberland
Dry Creek of Ohio River	Gallatin	2 nd Priority (2)	Salt/Licking
Dry Creek of Ohio River	Boone/Kenton	2 nd Priority (2)	Salt/Licking
Dry Creek of Triplett Creek	Rowan	2 nd Priority (2)	Salt/Licking
Dry Fork Creek of Noah's Spring Branch	Christian	1 st Priority	TN/MS/Cumberland
Dry Run of North Elkhorn Creek	Scott	2 nd Priority (2)	Kentucky
Eagle Creek of the Kentucky River	Carroll/Owen/Gallatin	Delisted (2)	Kentucky
Eagle Creek of the Kentucky River	Grant	Delisted (2)	Kentucky
Eagle Creek of the Kentucky River	Grant/Owen/Gallatin	TMDL Under Development (1), Delisted (1)	Kentucky
Eagle Creek of the Kentucky River	Grant/Owen	2 nd Priority (2)	Kentucky
East Branch of West Fork of Pond River	Christian	2 nd Priority (2)	Green/Tradewater
East Fork Little Sandy River	Boyd	TMDL Approved	Big and Little Sandy/Tygarts
East Fork of Beech Fork	Washington	1 st Priority	Salt/Licking
East Fork of Deer Creek	Webster	1 st Priority	Green/Tradewater
East Fork of Lynn Camp Creek	Knox/Whitley	2 nd Priority	TN/MS/Cumberland
East Fork Otter Creek of Kentucky River	Madison	2 nd Priority	Kentucky
East Hickman Creek of Hickman Creek	Fayette	TMDL Under Development (2)	Kentucky
Eddy Creek of Cumberland River (Lake Barkely)	Lyon	1 st Priority	TN/MS/Cumberland
Eddy Creek of Cumberland River (Lake Barkley)	Caldwell	2 nd Priority	TN/MS/Cumberland
Elijahs Creek of Ohio River	Boone	TMDL Approved	Salt/Licking
Elk Creek of Eagle Creek	Owen	2 nd Priority	Kentucky
Elk Creek of Pond River	Hopkins	1 st Priority	Green/Tradewater
Elk Fork of Licking River	Morgan	1 st Priority (4)	Salt/Licking
Elk Fork of Licking River	Morgan	2 nd Priority (3)	Salt/Licking
Elk Fork of Red River	Todd	1 st Priority	TN/MS/Cumberland
Elk Pond Creek of Pond River	Muhlenberg	1 st Priority (3)	Green/Tradewater

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Elk Spring Creek of Beaver Creek	Wayne	1 st Priority	TN/MS/Cumberland
Elkhorn Creek of Kentucky River	Franklin	1 st Priority (2), TMDL Under Development (1)	Kentucky
Ewing Creek of Cumberland River	Harlan	1 st Priority (2)	TN/MS/Cumberland
Ferguson Creek of Cumberland River	Livingston	1 st Priority	TN/MS/Cumberland
Ferguson Creek of Cumberland River	Livingston	2 nd Priority	TN/MS/Cumberland
Fern Creek/Northern Ditch of Pond Creek	Jefferson	1 st Priority (4)	Salt/Licking
Ferris Fork Creek of Marrowbone Creek	Cumberland	1 st Priority (2)	TN/MS/Cumberland
Flat Creek of Kentucky River	Franklin	2 nd Priority (2)	Kentucky
Flat Creek of Licking River	Bath	1 st Priority	Salt/Licking
Flat Creek of Pond River	Hopkins	TMDL Under Development (1)	Green/Tradewater
Flat Run of Stoner Creek	Bourbon	1 st Priority (3)	Salt/Licking
Fleming Creek of Licking River	Fleming/Nicholas	TMDL Approved(1)	Salt/Licking
Fleming Creek of Licking River	Fleming/Nicholas	TMDL Under Development (2)	Salt/Licking
Floyds Fork of Salt River	Jefferson/Bullitt	TMDL Approved (1)	Salt/Licking
Floyds Fork of Salt River	Jefferson	1 st Priority (3)	Salt/Licking
Ford Ditch of Rhodes Creek	Daviess	2 nd Priority (3)	Green/Tradewater
Fourmile Creek of Ohio River	Campbell	Delisted (2)	Salt/Licking
Fourmile Creek of Ohio River	Campbell	1 st Priority	Salt/Licking
Fox Creek of Licking River	Fleming	1 st Priority (2)	Salt/Licking
Fox Creek of Licking River	Fleming	2 nd Priority	Salt/Licking
Gilbert Creek of Mayfield Creek	Graves	1 st Priority (2)	TN/MS/Cumberland
Gillies Ditch of Rhodes Creek	Daviess	1 st Priority (3)	Green/Tradewater
Gilmore Creek of Craborchard Creek	Lincoln/Pulaski	2 nd Priority (2)	TN/MS/Cumberland
Glens Fork of Russell Creek	Adair	1 st Priority	Green/Tradewater
Goodin Creek of Cumberland River	Knox	2 nd Priority (2)	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Goose Creek of Benson Creek	Shelby	TMDL Under Development (2)	Kentucky
Goose Creek of Locust Creek	Bracken	2 nd Priority	Salt/Licking
Goose Creek of Ohio River	Jefferson	1 st Priority (3)	Salt/Licking
Goose Creek of Ohio River	Jefferson	2 nd Priority (3)	Salt/Licking
Goose Creek of South Fork Kentucky River	Clay	2 nd Priority	Kentucky
Goose Creek of Wilson Creek	Graves	2 nd Priority (3)	TN/MS/Cumberland
Goose Pond Ditch/Wardens Slough	Union	1 st Priority	Green/Tradewater
Grapevine Creek of North Fork Kentucky River	Perry	1 st Priority (4)	Kentucky
Grassy Creek of Rough River	Ohio	1 st Priority (3)	Green/Tradewater
Grassy Lick Creek of Hinkston Creek	Montgomery	2 nd Priority (2)	Salt/Licking
Grassy Run of Eagle Creek	Grant	2 nd Priority-Delisting Requested	Kentucky
Greasy Creek of Cumberland River	Bell	TMDL Approved	TN/MS/Cumberland
Green River of Ohio River	Hart/Edmonson/Green	1 st Priority –Delisting Requested	Green/Tradewater
Green River of Ohio River	McLean/Butler/Ohio	2 nd Priority-Delisting Requested	Green/Tradewater
Green River of Ohio River	Hart	2 nd Priority	Green/Tradewater
Griers Creek of Kentucky River	Woodford	2 nd Priority (3)	Kentucky
Groves Creek of Green River	Webster/Henderson	1 st Priority	Green/Tradewater
Guess Creek of Tennessee River	Livingston	2 nd Priority	TN/MS/Cumberland
Guist Creek of Brashears Creek	Shelby	2 nd Priority (3)	Salt/Licking
Gunpowder Creek of Ohio River	Boone	TMDL Approved	Salt/Licking
Gunpowder Creek of Ohio River	Boone	1 st Priority (3)	Salt/Licking
Gunpowder Creek of Ohio River	Boone	2 nd Priority	Salt/Licking
Hammon's Fork of Collins Fork	Knox	2 nd Priority (3)	Kentucky
Hanging Fork of Dix River	Lincoln	1 st Priority	Kentucky

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Hardins Creek of Sinking Creek	Breckinridge	1 st Priority (3)	Salt/Licking
Hardwick Creek of Red River	Powell	1 st Priority	Kentucky
Hardy Creek of Little Kentucky River	Trimble	1 st Priority (3)	Salt/Licking
Harrods Creek of Ohio River	Jefferson/Oldham	Delisted	Salt/Licking
Harrods Creek of Ohio River	Jefferson/Oldham	TMDL Approved	Salt/Licking
Hatchell Branch of Eagle Creek	McCreary	2 nd Priority	TN/MS/Cumberland
Hatton Creek of Red River	Powell	2 nd Priority	Kentucky
Havana Creek of Deer Creek	Webster	2 nd Priority	Green/Tradewater
Hawes Fork of Quicksand Creek	Breathitt	1 st Priority (4)	Kentucky
Hazel Creek of Wetland Ponds (Axe Lake)	Ballard	1 st Priority (3)	TN/MS/Cumberland
Hell Creek of North Fork Kentucky River	Lee	2 nd Priority (2)	Kentucky
Hickman Creek of Kentucky River	Jessamine	TMDL Under Development	Kentucky
Hickory Creek of Cumberland	Livingston	1 st Priority	TN/MS/Cumberland
Highland Creek of Ohio River	Union	1 st Priority (2)	Green/Tradewater
Hinkston Creek of South Fork Licking River	Bourbon	1 st Priority (2)	Salt/Licking
Hinkston Creek of South Fork Licking River	Bourbon	2 nd Priority (2)	Salt/Licking
Hinkston Creek of South Fork Licking River	Montgomery	1 st Priority (3)	Salt/Licking
Hinkston Creek of South Fork Licking River	Montgomery	2 nd Priority	Salt/Licking
Hite Creek of Ohio River	Jefferson	1 st Priority	Salt/Licking
Hood Creek of Kentucky River	Boyd	1 st Priority (2)	Big and Little Sandy/Tygarts
Holly Creek of North Fork Kentucky River	Wolfe	2 nd Priority	Kentucky
Horse Creek of Goose Creek	Clay	2 nd Priority	Kentucky
Houston Creek of Stoner Creek	Bourbon	1 st Priority	Salt/Licking
Houston Creek of Stoner Creek	Bourbon	2 nd Priority	Salt/Licking
Humphrey Creek of Ohio River	Ballard	2 nd Priority (2)	TN/MS/Cumberland
Hunting Creek of Quicksand Creek	Breathitt	1 st Priority (3)	Kentucky

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Hurricane Creek of Obion Creek	Carlisle	2 nd Priority (3)	TN/MS/Cumberland
Hurricane Creek of Tradewater River	Hopkins	1 st Priority (3)	Green/Tradewater
Indian Creek of Buck Creek	Pulaski	2 nd Priority (2)	TN/MS/Cumberland
Indian Creek of Green River	Butler	2 nd Priority (2)	Green/Tradewater
Island Creek of Tennessee River	McCracken	1 st Priority (2)	TN/MS/Cumberland
Island Creek of Tennessee River	McCracken	2 nd Priority	TN/MS/Cumberland
Issacs Creek of Pond River	Millport	1 st Priority (2)	Green/Tradewater
Jarrels Creek of Pond River	Muhlenberg	1 st Priority (4)	Green/Tradewater
Jarrett Fork of Caney Creek	Grayson	1 st Priority (3)	Green/Tradewater
Jenny Hollow Branch of Horse Branch	Ohio	1 st Priority (3)	Green/Tradewater
Jenneys Branch of Laurel Creek	McCreary	1 st Priority	TN/MS/Cumberland
Jeptha Creek of Guist Creek	Shelby	1 st Priority (2)	Salt/Licking
Joes Branch of North Fork Panther Creek	Daviess	2 nd Priority	Green/Tradewater
Joes Run of North Fork Panther Creek	Daviess	2 nd Priority	Green/Tradewater
Johnson Creek of Licking River	Magoffin	1 st Priority	Salt/Licking
Johnson Creek of Licking River	Robertson	1 st Priority	Salt/Licking
Jonathan Creek of Tennessee River (Kentucky Lake)	Calloway/Marshall	2 nd Priority	TN/MS/Cumberland
Jones Creek of North Rolling Fork	Marion	2 nd Priority	Salt/Licking
Judy Creek of Red River	Powell	1 st Priority	Kentucky
Kenady Creek of Muddy Fork	Trigg	2 nd Priority	TN/MS/Cumberland
Kentucky River of Ohio River	Madison/Fayette/ Jessamine/Clark	1 st Priority	Kentucky
Kentucky River of Ohio River	Carroll/Henry/Owen	2 nd Priority	Kentucky
Kentucky River of Ohio River	Madison/Fayette/ Jessamine/Clark	2 nd Priority-Delisting Requested	Kentucky
Kentucky River of Ohio River	Madison/Estill/Clark	2 nd Priority-Delisting Requested	Kentucky

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Kentucky River of Ohio River	Franklin/Jessamine/ Woodford/Mercer/ Anderson	2 nd Priority	Kentucky
Knob Creek of Blackamore Creek	Graves	1 st Priority	TN/MS/Cumberland
Knoblick Creek of Deer Creek	Webster	1 st Priority (4)	Green/Tradewater
Knox Creek of Tug Fork	Pike	2 nd Priority (2)	Big and Little Sandy/Tygarts
Lacey Creek of Red River	Wolfe	2 nd Priority	Kentucky
Lambs Creek of Clear Creek	Hopkins	2 nd Priority (3)	Green/Tradewater
Laurel Creek of Goose Creek	Clay	Delisted (4)	Kentucky
Laurel Creek of Goose Creek	Clay	2 nd Priority	Kentucky
Laurel Fork of Clear Fork	Whitley	1 st Priority	TN/MS/Cumberland
Laurel River of Cumberland River	Laurel	TMDL Not Required	TN/MS/Cumberland
Laurel River of Cumberland River	Laurel	TMDL Not Required	TN/MS/Cumberland
Laurel River of Cumberland River	Laurel	1 st Priority (2)	TN/MS/Cumberland
Left Fork Island Creek of Island Creek	Owsley	TMDL Not Required	Kentucky River
Left Fork Millstone Creek of Millstone Creek	Letcher	1 st Priority (2)	Kentucky River
Left Fork Straight Creek of Straight Creek	Bell	TMDL Approved (1)	TN/MS/Cumberland
Left Fork Straight Creek of Straight Creek	Bell	1 st Priority (3)	TN/MS/Cumberland
Left Fork White Oak Creek of Licking River	Morgan/Magoffin	2 nd Priority (3)	Salt/Licking
Levisa Fork of Big Sandy River	Lawrence	1 st Priority (2)	Big and Little Sandy/Tygarts
Levisa Fork of Big Sandy River	Johnson/Floyd	1 st Priority	Big and Little Sandy/Tygarts
Levisa Fork of Big Sandy River	Pike	1 st Priority (2)	Big and Little Sandy/Tygarts
Lewis Creek of Green River	Ohio	2 nd Priority (2)	Green/Tradewater
Lick Creek of Clear Creek	Hopkins	1 st Priority	Green/Tradewater
Lick Creek of Eagle Creek	Carroll	2 nd Priority-Delisting Requested (2)	Kentucky

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Lick Creek of Green River	Henderson	1 st Priority	Green/Tradewater
Lick Run Creek of Ohio River	Breckinridge	2 nd Priority (2)	Salt/Licking
Licking River of Ohio River	Morgan	Delisted	Salt/Licking
Licking River of Ohio River	Campbell/Kenton	2 nd Priority	Salt/Licking
Licking River of Ohio River	Magoffin	1 st Priority	Salt/Licking
Licking River of Ohio River	Magoffin	2 nd Priority	Salt/Licking
Lindy Creek of Lynn Camp Creek	Hart	2 nd Priority (3)	Green/Tradewater
Line Fork of Defeated Creek	Letcher	2 nd Priority	Kentucky
Little Barren River of Green River	Green/Hart	2 nd Priority	Green/Tradewater
Little Bayou Creek of Bayou Creek	McCracken	TMDL Approved (1)	TN/MS/Cumberland
Little Bayou Creek of Bayou Creek	McCracken	1 st Priority (3)	TN/MS/Cumberland
Little Bayou de Chien of Bayou de Chien	Fulton	1 st Priority (2)	TN/MS/Cumberland
Little Bayou de Chien of Bayou de Chien	Hickman/Fulton	2 nd Priority	TN/MS/Cumberland
Little Beaverdam Creek of Green River	Warren	2 nd Priority (2)	Green/Tradewater
Little Clear Creek of Clear Creek	Bell	1 st Priority (3)	TN/MS/Cumberland
Little Creek of Obion Creek	Carlisle	1 st Priority (3)	TN/MS/Cumberland
Little Cypress Creek of Cypress Creek	Marshall	1 st Priority (2)	TN/MS/Cumberland
Little Cypress Creek of Obion Creek	Graves	1 st Priority	TN/MS/Cumberland
Little Cypress Creek of Pond River	Muhlenberg	2 nd Priority (3)	Green/Tradewater
Little Goose Creek of Goose Creek	Jefferson	Delisted (1)	Salt/Licking
Little Goose Creek of Goose Creek	Jefferson	1 st Priority (1)	Salt/Licking
Little Kentucky River of Ohio River	Henry	2 nd Priority (3)	Salt/Licking
Little Laurel River of Laurel River	Laurel	1 st Priority (5)	TN/MS/Cumberland
Little Mud Creek of Bayou de Chien	Fulton	2 nd Priority (2)	TN/MS/Cumberland
Little Muddy Creek of Green River	Butler	1 st Priority	Green/Tradewater

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name Little Muddy Creek of Green River Little Pitman Creek of Pitman Creek Little Pitman Creek of Pitman Creek Little Poplar Creek of Cumberland River Little River of Cumberland River (Lake Barkley)	County Butler Taylor/Green Taylor/Green Knox Trigg	Status 2 nd Priority (2) Delisted (1) 1 st Priority 2 nd Priority Delisted (1)	Watershed Unit Green/Tradewater Green/Tradewater Green/Tradewater TN/MS/Cumberland TN/MS/Cumberland
Little River of Cumberland River (Lake Barkley) Little Sandy River of Ohio River	Trigg Trigg Christian Trigg/Christian Greenup/Carter	1 st Priority (4) 2 nd Priority (4) 1 st Priority (4) 2 nd Priority (3) 2 nd Priority	TN/MS/Cumberland TN/MS/Cumberland TN/MS/Cumberland TN/MS/Cumberland Big and Little Sandy/Tygarts
Little South Fork of South Fork Cumberland River Little Stoner Creek of Stoner Creek Livingston Creek of Cumberland River Livingston Creek of Cumberland River Locust Creek of Licking River	Wayne/McCreary Clark Crittenden/Lyon Crittenden/Lyon Fleming	1 st Priority 1 st Priority 1 st Priority (2) 2 nd Priority 2 nd Priority	TN/MS/Cumberland Salt/Licking TN/MS/Cumberland TN/MS/Cumberland Salt/Licking
Locust Creek of Ohio River Logan Run of Fleming Creek Logan Run of Fleming Creek Long Falls Creek of Green River Long Fork of Buckhorn Creek	Bracken Fleming Fleming McLean Breathitt	1 st Priority (2) TMDL Approved (1) TMDL Under Development (1) 1 st Priority (4) 1 st Priority	Salt/Licking Salt/Licking Salt/Licking Green/Tradewater Kentucky
Long Lick Creek of Rough River Long Lick Creek of Salt River Long Pond Branch of Muddy Fork Little River Long Run of Floyds Fork Looney Creek of Poor Fork	Breckinridge Bullitt Trigg Jefferson Harlan	1 st Priority (4) 1 st Priority 1 st Priority 1 st Priority TMDL Approved	Green/Tradewater Salt/Licking TN/MS/Cumberland Salt/Licking TN/MS/Cumberland
Lost Creek of Troublesome Creek Lotts Creek of North Kentucky River	Breathitt Perry	1 st Priority (4) 1 st Priority (4)	Kentucky Kentucky

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name Lower Branch of North Fork Licking River Lower Buffalo Creek of South Fork Kentucky River Lower Howard Creek of Kentucky	County Christian Owsley Clark	Status 2 nd Priority 2 nd Priority TMDL Under Development (2)	Watershed Unit TN/MS/Cumberland Kentucky Kentucky
Lulbegrud Creek of Red River	Clark/Powell	2 nd Priority 1 st Priority 2 nd Priority 2 nd Priority 2 nd Priority	Kentucky
Lynn Camp Creek of Laurel River	Laurel/Knox/Whitley		TN/MS/Cumberland
Lynn Camp Creek of Laurel River	Knox/Whitley		TN/MS/Cumberland
Lynn Fork of Craborchard Creek	Webster		Green/Tradewater
Lytles Fork of Eagle Creek	Scott County		Kentucky
Marrowbone Creek of Cumberland Creek Marsh Creek of Cumberland River Martins Fork of Clover Fork Martins Fork of Clover Fork Martins Fork of Clover Fork	Cumberland	2 nd Priority	TN/MS/Cumberland
	McCreary	1 st Priority (2)	TN/MS/Cumberland
	Harlan	TMDL Approved (1)	TN/MS/Cumberland
	Harlan	1 st Priority (2)	TN/MS/Cumberland
	Harlan	2 nd Priority	TN/MS/Cumberland
Massac Creek of Ohio River	McCracken	Delisted (2) 2 nd Priority 1 st Priority (4) 1 st Priority (3) 1 st Priority	TN/MS/Cumberland
Massac Creek of Ohio River	McCracken		TN/MS/Cumberland
Mayfield Creek of Mississippi River	Carlisle		TN/MS/Cumberland
Mayfield Creek of Mississippi River	Graves		TN/MS/Cumberland
Mayfield Creek of Mississippi River	Calloway		TN/MS/Cumberland
Mayfield Creek of Mississippi River	Carlisle/Ballard Carlisle McCracken Graves Scott	2 nd Priority (2)	TN/MS/Cumberland
Mayfield Creek of Mississippi River		2 nd Priority (2)	TN/MS/Cumberland
Mayfield Creek of Mississippi River		2 nd Priority (3)	TN/MS/Cumberland
Mayfield Creek of Mississippi River		2 nd Priority (2)	TN/MS/Cumberland
McConnell Run of North Elkhorn Creek		TMDL Under Development (2)	Kentucky
McGrady Creek of Caney Creek	Ohio	2 nd Priority (2)	Green/Tradewater
Meadow Creek of Cumberland River	Whitley/Knox	2 nd Priority	TN/MS/Cumberland
Meadow Creek of South Fork Kentucky River	Owsley	2 nd Priority	Kentucky
Middle Fork Beargrass Creek of Beargrass Creek	Jefferson	Delisted (1)	Salt/Licking

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Middle Fork Beargrass Creek of Beargrass Creek	Jefferson	1 st Priority (4)	Salt/Licking
Middle Fork Clarks River of Clarks River	Calloway	1 st Priority (3)	TN/MS/Cumberland
Middle Fork Clarks River of Clarks River	Calloway	2 nd Priority (2)	TN/MS/Cumberland
Middle Fork Creek of Clarks River	Marshall	1 st Priority	TN/MS/Cumberland
Middle Fork Kentucky River	Leslie	Delisted (3)	Kentucky
Middle Fork Licking River of Licking River	Magoffin	1 st Priority	Salt/Licking
Middle Fork of Richland Creek	Knox	2 nd Priority	TN/MS/Cumberland
Mill Creek of Ohio River	Jefferson	1 st Priority (4)	Salt/Licking
Mill Creek of Salt River	Hardin	1 st Priority	Salt/Licking
Mill Creek of Smith Creek	Ohio	1 st Priority	Green/Tradewater
Mill Creek Branch of Mill Creek	Hardin	TMDL Not Required	Salt/Licking
Mill Creek Cutoff of Ohio River	Jefferson	1st Priority	Salt/Licking
Mitchell Creek of Sinking Creek	Laurel	1 st Priority	TN/MS/Cumberland
Moseby Branch of Eagle Creek	Owen	TMDL Not Required	Kentucky
Mud Creek of Bayou de Chien	Fulton	1 st Priority (3)	TN/MS/Cumberland
Mud Creek of Clear Fork	Whitley	2 nd Priority	TN/MS/Cumberland
Mud River of Green River	Muhlenberg/Butler	1 st Priority	Green/Tradewater
Mud River of Green River	Muhlenberg/Butler/	1 st Priority	Green/Tradewater
	Logan		
Mud River of Green River	Logan	1 st Priority	Green/Tradewater
Muddy Creek of Caney Creek	Ohio	2 nd Priority (2)	Green/Tradewater
Muddy Creek of Green River	Butler	1 st Priority	Green/Tradewater
Muddy Creek of Green River	Butler	2 nd Priority (2)	Green/Tradewater
Muddy Creek of Kentucky River	Madison	1 st Priority	Kentucky
Muddy Creek of Rough River	Ohio	1 st Priority	Green/Tradewater
Muddy Creek of Rough River	Ohio	2 nd Priority (3)	Green/Tradewater
Muddy Fork Little River of Little River	Trigg	1 st Priority	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Muddy Fork of Beargrass Creek Mussin Branch of Moore Creek	Jefferson Marion	1 st Priority	Salt/Licking
Narge Creek of Pond River	Hopkins	TMDL Under Development (1) 1 st Priority	Salt/Licking Green/Tradewater
Newcombe Creek of Little Sandy River	Elliot	TMDL Approved (1)	Big and Little Sandy/Tygarts
Nolin River of Green River	Hart/Hardin/Grayson	1 st Priority	Green/Tradewater
North Benson Creek of Benson Creek	Franklin	TMDL Under Development (2)	Kentucky
North Branch of South Fork Panther Creek	Hancock/Ohio	1 st Priority	Green/Tradewater
North Elkhorn Creek of Elkhorn Creek	Fayette	1 st Priority (2)	Kentucky
North Fork Barnett Creek of Barnett Creek	Ohio	2 nd Priority	Green/Tradewater
North Fork Kentucky River and Tributaries	Breathitt/Lee/Letcher/ Perry/Wolfe	TMDL Approved (1)	Kentucky
North Fork Kentucky River of Kentucky River	Letcher	1 st Priority	Kentucky
North Fork Licking River of Licking River	Bracken/Mason	1 st Priority (2)	Salt/Licking
North Fork Little River of Little River	Christian	1 st Priority (4)	TN/MS/Cumberland
North Fork Little River of Little River	Christian	2 nd Priority (3)	TN/MS/Cumberland
North Fork North Benson Creek	Franklin	TMDL Under Development (2)	Kentucky
North Fork Panther Creek of Panther Creek	Daviess	1 st Priority (3)	Green/Tradewater
North Fork Panther Creek of Panther Creek	Daviess	2 nd Priority (2)	Green/Tradewater
Obion Creek of Mississippi River	Hickman/Graves	2 nd Priority (2)	TN/MS/Cumberland
Obion Creek of Mississippi River	Graves	2 nd Priority	TN/MS/Cumberland
Obion Creek of Mississippi River	Fulton	1 st Priority (4)	TN/MS/Cumberland
Obion Creek of Mississippi River	Hickman	1 st Priority	TN/MS/Cumberland
Ohio River	Kentucky/Ohio/Indiana		Not applicable
Ohio River	Kentucky/Ohio/Indiana	, ,	Not applicable
Ohio River	Kentucky/Ohio/Indiana	2 nd Priority; multiple segments	Not applicable

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Old Panther Creek of Panther Creek	Daviess	1 st Priority	Green/Tradewater
Opossum Creek of Obion Creek	Graves	1 st Priority	TN/MS/Cumberland
Otter Creek of Kentucky River	Madison	2 nd Priority	Kentucky
Otter Creek of Ohio River	Meade	2 nd Priority	Salt/Licking
Otter Creek of Pond River	Hopkins	1 st Priority (3)	Green/Tradewater
Paint Lick Creek of Kentucky River	Garrard/Madison	2 nd Priority	Kentucky
Panther Creek of Green River	Daviess	1 st Priority (5)	Green/Tradewater
Pennsylvania Run of Floyds Fork	Jefferson/Bullitt	1 st Priority	Salt/Licking
Pettys Fork of Russell Creek	Adair	1 st Priority (3)	Green/Tradewater
Phillips Creek of Licking River	Campbell	1 st Priority	Salt/Licking
Pigeon Creek of Muddy Creek	Ohio	2 nd Priority	Green/Tradewater
Pigeon Roost Creek of Tradewater River	Crittenden	2 nd Priority (2)	Green/Tradewater
Pitman Creek of Cumberland River	Pulaski	2 nd Priority	TN/MS/Cumberland
Pleasant Grove Creek of Red River	Logan	1 st Priority (2)	TN/MS/Cumberland
Pleasant Run of Drakes Creek	Hopkins	TMDL Approved	Green/Tradewater
Plum Creek of Pond Creek	Muhlenburg	1 st Priority (4)	Green/Tradewater
Plum Creek of Red River	Powell	2 nd Priority	Kentucky
Polls Creek of Cutshin Creek	Leslie	2 nd Priority	Kentucky
Pond Creek of Clear Creek	Hopkins	2 nd Priority (4)	Green/Tradewater
Pond Creek of Green River	Muhlenburg	1 st Priority (3), TMDL Under	Green/Tradewater
		Development (1)	
Pond Creek of Green River	Muhlenburg	1 st Priority	Green/Tradewater
Pond Creek of Green River	Muhlenburg	2 nd Priority	Green/Tradewater
Pond Creek of Ohio River	Oldham	2 nd Priority	Salt/Licking
Pond Creek of Salt River	Jefferson	1 st Priority (3)	Salt/Licking

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Pond Drain of Cypress Creek	McLean	2 nd Priority (2)	Green/Tradewater
Pond River of Green River	McLean/Muhlenburg/ Hopkins/Christian	2 nd Priority (3)	Green/Tradewater
Poor Fork of Cumberland River	Harlan	TMDL Approved (1)	TN/MS/Cumberland
Poor Fork of Cumberland River	Harlan	1 st Priority	TN/MS/Cumberland
Pope Lick Creek of Floyds Fork	Jefferson	1 st Priority	Salt/Licking
Poplar Creek of Fleming Creek	Fleming	TMDL Approved (1)	Salt/Licking
Poplar Grove Branch of Big Brush Creek	Taylor/Green	1 st Priority	Green/Tradewater
Potter Fork of Boone Fork	Letcher	TMDL Under Development (1)	Kentucky
Prickly Ash of Slate Creek	Bath	1 st Priority	Salt/Licking
Puckett Creek of Cumberland River	Harlan/Bell	TMDL Approved (1)	TN/MS/Cumberland
Puncheon Camp Creek of Licking River	Magoffin	1 st Priority	Salt/Licking
Puncheon Camp Creek of Middle Fork Kentucky River	Breathitt	2 nd Priority	Kentucky
Quicksand Creek of North Fork Kentucky River	Breathitt	1 st Priority (5)	Kentucky
Quicksand Creek of North Fork Kentucky River	Breathitt	2 nd Priority	Kentucky
Raccoon Creek of South Fork Rockcastle River	Laurel	2 nd Priority (2)	TN/MS/Cumberland
Rattlesnake Creek of Eagle Creek	Grant	1 st Priority	Kentucky
Red Bird River of South Fork Kentucky River	Clay	1 st Priority	Kentucky
Red River of Cumberland River	Logan	2 nd Priority	TN/MS/Cumberland
Red River of Cumberland River	Simpson	2 nd Priority	TN/MS/Cumberland
Red River of Kentucky River	Clark/Estill/Powell	Delisted (1)	Kentucky
Red River of Kentucky River	Menifee/Wolfe	Delisted (2)	Kentucky
Reeves Branch of Sugar Creek	Marshall	2 nd Priority	TN/MS/Cumberland
Render Creek of Lewis Creek	Ohio	1 st Priority (3), TMDL Under Development (1)	Green/Tradewater
Renfro Creek of Roundstone Creek	Rockcastle	2 nd Priority (2)	TN/MS/Cumberland
Rhodes Creek of Green River	Daviess	2 nd Priority	Green/Tradewater

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Rhodes Creek of Panther Creek	Daviess	1 st Priority (3)	Green/Tradewater
Richland Creek of Clear Creek	Hopkins	1 st Priority (3)	Green/Tradewater
Richland Creek of Cumberland River	Knox	TMDL Approved (1)	TN/MS/Cumberland
Richland Creek of Cumberland River	Knox	1 st Priority (2)	TN/MS/Cumberland
Richland Creek of Cumberland River	Livingston	1 st Priority	TN/MS/Cumberland
Richland Creek of Eagle Creek	Owen	2 nd Priority	Kentucky
Richland Slough of Green River	Henderson/Daviess	1 st Priority	Green/Tradewater
Road Run of Cartwright Creek	Washington	2 nd Priority	Salt/Licking
Roaring Paunch Creek of South Fork Cumberland River	McCreary	1 st Priority (3)	TN/MS/Cumberland
Rock Creek of South Fork Cumberland River	McCreary	TMDL Under Development (1)	TN/MS/Cumberland
Rock Creek of South Fork Cumberland River	McCreary	2 nd Priority	TN/MS/Cumberland
Rockhouse Creek of North Fork Kentucky River	Letcher	1 st Priority (5)	Kentucky
Rolling Fork of Salt River	Bullitt/Harden/Nelson	Delisted	Salt/Licking
Roundstone Creek of Rockcastle River	Rockcastle	1 st Priority (3)	TN/MS/Cumberland
Running Slough of Obion River (Reelfoot Lake)	Fulton	2 nd Priority	TN/MS/Cumberland
Rush Creek of Crooked Creek	Crittenden	2 nd Priority	Green/Tradewater
Russell Creek of Green River	Adair	1 st Priority	Green/Tradewater
Ryans Creek of Jellico Creek	McCreary/Whitley	TMDL Under Development (1)	TN/MS/Cumberland
Ryans Creek of Jellico Creek	McCreary/Whitley	1 st Priority	TN/MS/Cumberland
Salt Lick Creek of Gasper River	Warren	1 st Priority (3)	Green/Tradewater
Salt Lick Creek of Licking River	Bath	2 nd Priority	Salt/Licking
Salt River of Ohio River	Bullitt	1 st Priority	Salt/Licking
Salt River of Ohio River	Anderson	1 st Priority, Delisting Requested	Salt/Licking
Sam Branch of Fishing Creek	Pulaski	2 nd Priority	TN/MS/Cumberland
Sand Lick Creek of Pond Creek	Muhlenberg	2 nd Priority	Green/Tradewater
	•	-	

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Sand Lick Fork of South Fork Red River	Powell	Delisted	Kentucky
Sandy Creek of Cumberland River	Livingston	1 st Priority	TN/MS/Cumberland
Sawdridge Creek of Cedar Creek	Owen	2 nd Priority (3)	Kentucky
Scrubgrass Creek of Cassidy Creek	Nicholas	1 st Priority	Salt/Licking
Sexton Creek of Goose Creek	Clay	2 nd Priority (2)	Kentucky
Shawnee Creek of Mississippi River	Ballard	2 nd Priority	TN/MS/Cumberland
Shawnee Creek Slough of Mississippi River	Ballard	1 st Priority	TN/MS/Cumberland
Silver Creek of Kentucky River	Madison	1 st Priority	Kentucky
Silver Creek of Kentucky River	Madison	2 nd Priority	Kentucky
Sims Fork of Left Fork Straight Creek	Bell	1 st Priority	TN/MS/Cumberland
Sinking Creek of Ohio River	Breckinridge	1 st Priority (4)	Salt/Licking
Sinking Fork of Little River	Christian	1 st Priority	TN/MS/Cumberland
Sinking Fork of Little River	Trigg	2 nd Priority	TN/MS/Cumberland
Skegg Creek of Rockcastle River	Rockcastle	2 nd Priority (2)	TN/MS/Cumberland
Skinframe Creek of Livingston Creek	Lyon	1 st Priority	TN/MS/Cumberland
Skinner Creek of Casey Creek	Trigg	1 st Priority	TN/MS/Cumberland
Slate Creek of Licking River	Bath	1 st Priority	Salt/Licking
Sleepy Run of Fleming Creek	Fleming	TMDL Approved	Salt/Licking
Slop Ditch of Southern Ditch	Jefferson	1 st Priority	Salt/Licking
Snag Creek of Ohio River	Bracken	1 st Priority	Salt/Licking
South Elkhorn Creek of Elkhorn Creek	Scott/Woodford	Delisted (2)	Kentucky
South Elkhorn Creek of Elkhorn Creek	Scott/Woodford	TMDL Under Development (2)	Kentucky
South Elkhorn Creek of Elkhorn Creek	Woodford	1 st Priority	Kentucky
South Elkhorn Creek of Elkhorn Creek	Fayette	2 nd Priority, TMDL Under	Kentucky
		Development (2)	
South Fork Bayou de Chien of Bayou de Chien	Graves	1 st Priority	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
South Fork Beargrass Creek of Beargrass Creek	Jefferson	1 st Priority (3)	Salt/Licking
South Fork Beaver Creek of Beaver Creek	Barren	2 nd Priority	Green/Tradewater
South Fork Gunpowder Creek	Boone	1 st Priority (4)	Salt/Licking
South Fork Licking River	Pendleton/Harrison	Delisted (2)	Salt/Licking
South Fork Little River of Little River	Christian	1 st Priority (3)	TN/MS/Cumberland
South Fork Red River of Middle Fork Red River	Powell	Delisted	Kentucky
South Fork Panther Creek of Panther Creek	Daviess	1 st Priority (5)	Green/Tradewater
South Fork Quicksand Creek of Quicksand Creek	Breathitt	2 nd Priority (2)	Kentucky
South Fork Rockcastle River of Rockcastle River	Laurel	1 st Priority (2)	TN/MS/Cumberland
South Fork Rockcastle River of Rockcastle River	Laurel	2 nd Priority (4)	TN/MS/Cumberland
Southern Ditch of Pond Creek	Jefferson	Delisted	Salt/Licking
Southern Ditch of Pond Creek	Jefferson	1 st Priority	Salt/Licking
Spring Creek of Livingston Creek	Lyon	1 st Priority	TN/MS/Cumberland
Spring Creek of West Fork Clarks River	Graves	2 nd Priority	TN/MS/Cumberland
Spring (Blue Spring) Ditch of Northern Ditch	Jefferson	1 st Priority (2)	Salt/Licking
Spring Fork of Quicksand Creek	Breathitt	1 st Priority (4)	Kentucky
Sputzman Creek of Green River	Henderson	2 nd Priority	Green/Tradewater
Station Camp Creek of Kentucky River	Estill	2 nd Priority	Kentucky
Stevens Creek of Eagle Creek	Owen	2 nd Priority	Kentucky
Stinking Creek of Cumberland River	Knox	2 nd Priority (4)	TN/MS/Cumberland
Stoner Creek of South Fork Licking River	Bourbon	1 st Priority	Salt/Licking
Stony Creek of Licking River	Nicholas	1 st Priority	Salt/Licking
Stony Fork of Bennetts Fork	Bell	1 st Priority (3)	TN/MS/Cumberland
Stony Fork of Straight Creek	Bell	1 st Priority (3)	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Straight Creek of Cumberland River	Harlan/Bell	TMDL Approved (1)	TN/MS/Cumberland
Straight Creek of Cumberland River	Harlan/Bell	1 st Priority	TN/MS/Cumberland
Straight Creek of Cumberland River	Bell	1 st Priority (2), TMDL Approved (1)	TN/MS/Cumberland
Straight Creek of Elk Fork	Morgan	1 st Priority (3)	Salt/Licking
Strodes Creek of Stoner Creek	Bourbon	1 st Priority (4)	Salt/Licking
Stump Cave Branch of South Fork Red River	Powell	TMDL Approved	Kentucky
Sugar Creek of Clear Creek	Hopkins	TMDL Approved	Green/Tradewater
Sugar Creek of Cumberland River	Livingston	2 nd Priority	TN/MS/Cumberland
Sugar Creek of Muddy Fork Little River	Christian	1 st Priority (2)	TN/MS/Cumberland
Sugg Creek of Cypress Creek	Union	1 st Priority (3)	Green/Tradewater
Sulphur Creek of Drennon Creek	Henry	1 st Priority (3)	Kentucky
Sunfish Creek of Bear Creek	Grayson/Edmonson	2 nd Priority (2)	Green/Tradewater
Sweepstakes Branch of South Fork Panther Creek	Daviess	2 nd Priority (2)	Green/Tradewater
Swift Camp Creek of Red River	Wolfe	TMDL Under Development (2)	Kentucky
Sycamore Branch of Bear Creek	Edmonson	1 st Priority	Green/Tradewater
Tate Creek of Kentucky River	Madison	TMDL Under Development (2)	Kentucky
Taylor Fork of Bear Creek	Grayson	1 st Priority (2)	Green/Tradewater
Ten Mile Creek of Eagle Creek	Grant	2 nd Priority	Kentucky
Tennessee River of Ohio River	Marshall	TMDL Not Required	TN/MS/Cumberland
Three Forks Creek of Eagle Creek	Grant/Owen	2 nd Priority	Kentucky
Three Lick Fork of Muddy Creek	Ohio	1 st Priority (4)	Green/Tradewater
Threemile Creek of Licking River	Campbell	1 st Priority (3)	Salt/Licking
Town Branch of Fleming Creek	Fleming	TMDL Approved (1)	Salt/Licking
Town Branch of Mud River	Logan	1 st Priority	Green/Tradewater
Town Branch of South Elkhorn Creek	Fayette	1 st Priority (3), TMDL Under Development(2)	Kentucky

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
Town Branch of South Elkhorn Creek	Fayette	1 st Priority (3)	Kentucky
Townsend Creek of South Fork Licking River	Harrison/Bourbon	1 st Priority	Salt/Licking
Trace Fork of Licking River	Magoffin	2 nd Priority (4)	Salt/Licking
Tradewater River of Ohio River	Union	1 st Priority	Green/Tradewater
Tradewater River of Ohio River	Hopkins/Caldwell	2 nd Priority	Green/Tradewater
Triplett Creek of Licking River	Rowan	1 st Priority (4)	Salt/Licking
Troublesome Creek of North Fork Kentucky River	Breathitt/Perry/Knott	TMDL Approved (1)	Kentucky
Troublesome Creek Of North Fork Kentucky River	Breathitt/Perry/Knott	1 st Priority (5)	Kentucky
Tug Fork of Big Sandy River	Lawrence	1 st Priority	Big and Little Sandy/Tygarts
Tug Fork of Big Sandy River	Martin/Lawrence	1 st Priority (3)	Big and Little Sandy/Tygarts
Two Mile Creek of Eagle Creek	Owen	TMDL Not Required	Kentucky
Tygarts Creek of Ohio River	Greenup	2 nd Priority	Big and Little Sandy/Tygarts
Tyson Branch of Tradewater River	Caldwell	1 st Priority	Green/Tradewater
Upper Branch of North Fork Little River	Christian	2 nd Priority	TN/MS/Cumberland
Upper Devil Creek of North Fork Kentucky River	Wolfe	2 nd Priority	Kentucky
Upper Howard Creek of Kentucky River	Clark	2 nd Priority	Kentucky
Upper Twin Creek of Middle Fork Kentucky River	Breathitt	2 nd Priority	Kentucky
UT of Baughman Fork of Boone Creek (River Mile 2.6)	Fayette	TMDL Approved (2)	Kentucky
UT of Brooks Run (River Mile 4.1)	Bullitt	TMDL Under Development(3)	Salt/Licking
UT of Butler Branch (River Mile 1.3)	Adair	2 nd Priority (2)	Green/Tradewater
UT of Cane Run (River Mile 6.05)	Scott/Fayette	1 st Priority	Kentucky
UT of Clear Creek (River Mile 24.4)	Hopkins	1 st Priority	Green/Tradewater
UT of Cool Springs Creek (River Mile 2.6)	Adair	1 st Priority (2)	Green/Tradewater
UT of Cypress Creek (River Mile 28.4)	Muhlenberg	2 nd Priority (2)	Green/Tradewater
UT of Elk Creek (River Mile 8.8)	Hopkins	1 st Priority	Green/Tradewater

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
UT of Flat Creek(River Mile 1.9)	Hopkins	1 st Priority	Green/Tradewater
UT of Fleming Creek (River Mile 4.28)	Fleming	TMDL Approved (1)	Salt/Licking
UT of Jennys Branch (River Mile 3.4)	McCreary	1 st Priority (2)	TN/MS/Cumberland
UT of Little Laurel River (River Mile 15.8)	Laurel	1 st Priority (2)	TN/MS/Cumberland
UT of Massac Creek(River Mile 5.2)	McCracken	2 nd Priority	TN/MS/Cumberland
UT of Massac Creek(River Mile 7.0)	McCracken	2 nd Priority	TN/MS/Cumberland
UT of Mayfield Creek (River Mile 24.0)	McCracken	1 st Priority (2)	TN/MS/Cumberland
UT of Mayfield Creek (River Mile 25.6)	Graves	1 st Priority (2)	TN/MS/Cumberland
UT of N Br of Lulbegrud Cr. (River Mile 2.6)	Montgomery	1 st Priority	Kentucky River
UT of Obion Creek (River Mile 16.3)	Hickman	1 st Priority (2)	TN/MS/Cumberland
UT of Old Beaver Dam Slough (River Mile 0.4)	Marshall	1 st Priority	TN/MS/Cumberland
UT of Pond Creek (River Mile 1.5) of Ohio River	Oldham	1 st Priority (3)	Salt/Licking
UT of Pond Creek (River Mile 8.8) of Green River	Muhlenberg	1 st Priority	Green/Tradewater
UT of Rolling Fork (River Mile 94.6)	Marion	TMDL Under Development (1)	Salt/Licking
UT of South Fork Russell Creek (River Mile 4.85)	Green	TMDL Approved (1)	Green/Tradewater
UT of Swift Camp Cr. (River Mile 11.7)	Wolfe	TMDL Under Development (2)	Kentucky
UT of Unnamed Ditch (River Mile 0.2) of Slover Creek (RM 3.4)	Webster	1 st Priority (3)	Green/Tradewater
UT of West Fork Lewis Creek (River Mile 1.4)	Ohio	1 st Priority	Green/Tradewater
UT of Wiggington Creek (River Mile 3.5)	Logan	1 st Priority	Green/Tradewater
Valley Creek of Nolin River	Hardin	1 st Priority (5)	Green/Tradewater
Ward Creek of Flynn Creek	Caldwell	1 st Priority	Green/Tradewater
Weirs Creek of Clear Creek	Hopkins	1 st Priority (3)	Green/Tradewater
West Fork of Clarks River	Graves	1 st Priority	TN/MS/Cumberland
West Fork of Clarks River	Graves	2 nd Priority	TN/MS/Cumberland
West Fork of Clarks River	Marshall	2 nd Priority	TN/MS/Cumberland

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	<u>Status</u>	Watershed Unit
West Fork of Clarks River West Fork of Clarks River (old channel) West Fork Drakes Creek of Drakes Creek West Fork Mill Creek of Mill Creek	Calloway Graves/Marshall Warren/Simpson Carroll	2 nd Priority (2)	TN/MS/Cumberland TN/MS/Cumberland Green/Tradewater Kentucky
West Fork of Pond River West Fork of Pond River West Hickman Creek of Hickman Creek	Christian Christian Jessamine	1 st Priority 2 nd Priority 2 nd Priority, TMDL Under Development (2)	Green/Tradewater Green/Tradewater Kentucky
West Hickman Creek of Hickman Creek	Jessamine/Fayette	2 nd Priority, TMDL Under Development (3)	Kentucky
Wetwoods Creek of Southern Ditch	Jefferson	1 st Priority (3)	Salt/Licking
White Lick Creek of Paint Lick Creek White Oak Creek of Tygarts Creek White Oak Creek of Rock Creek	Garrard Greenup McCreary	2 nd Priority 1 st Priority 1 st Priority (3), TMDL Under Development	Kentucky River Tygarts/Sandy TN/MS/Cumberland
White Oak Creek of Sinking Creek Whitley Branch of Little Laurel River	Laurel Laurel	1 st Priority (2) Delisted (1)	TN/MS/Cumberland TN/MS/Cumberland
Whitley Branch of Little Laurel River Wildcat Branch of Cumberland River Williams Creek of Elk Fork Wilson Run of Fleming Creek Wolf Branch Ditch of Rhodes Creek	Laurel Pulaski Morgan Fleming Daviess	1 st Priority (3) TMDL Under Development (1) 1 st Priority TMDL Approved (1) 2 nd Priority (4)	TN/MS/Cumberland TN/MS/Cumberland Salt/Licking Salt/Licking Green/Tradewater
Wolf Creek of Clear Fork Wolf Creek of Tradewater River Wolf Lick Creek of Mud River Wolf Run of Town Branch Wolf Run of Town Branch	Whitley Crittenden Logan Fayette Fayette	1 st Priority 1 st Priority 2 nd Priority (2) TMDL Under Development(2) 1 st Priority	TN/MS/Cumberland Green/Tradewater Green/Tradewater Kentucky Kentucky

Table 2-1 (con't). Alphabetic Listing of 2004 303(d)-Listed Streams for Kentucky

River Name	County	Status	Watershed Unit
Woolper Creek of Ohio River	Boone	1 st Priority (5)	Salt/Licking
Wooten Creek of Cutshin Creek	Leslie	2 nd Priority	Kentucky
Yellow Creek of Cumberland River	Bell	Delisted (3)	TN/MS/Cumberland
Yellow Creek of Cumberland River	Bell	2 nd Priority (4)	TN/MS/Cumberland
Yocum Creek of Clover Fork	Harlan	TMDL Approved	TN/MS/Cumberland

Table 2-2. Alphabetic Listing of 2004 303(d)-Listed Lakes for Kentucky

Lake Name	County	Status	Watershed Unit
Barren River Lake	Allan/Barren	2 nd Priority	Green/Tradewater
Briggs Lake	Logan	Delisted	Green/Tradewater
Buckhorn Lake	Perry	2 nd Priority	Kentucky
Campbellsville City Lake	Taylor	2 nd Priority (1), Delisted (1)	Green/Tradewater
Caneyville Reservoir	Grayson	2 nd Priority	Green/Tradewater
Carr Fork Lake	Knott	2 nd Priority	Kentucky
Corbin City Reservoir	Laurel	1 st Priority	TN/MS/Cumberland
Cave Run Lake	Bath/Rowan/Morgan/Menifee	2 nd Priority	Salt/Licking
Cranks Creek Lake	Harlan	2 nd Priority	TN/MS/Cumberland
Dewey Lake	Floyd	2 nd Priority	Big and Little Sandy/Tygarts
Doe Run Lake	Kenton	2 nd Priority	Salt/Licking
Elmer Davis Lake	Owen	2 nd Priority	Kentucky
General Butler State Park Lake	Carroll	2 nd Priority	Kentucky
Grapevine Lake	Hopkins	2 nd Priority	Green/Tradewater
Grayson Lake	Carter/Elliot	2 nd Priority	Big and Little Sandy/Tygarts
Green River Lake	Taylor/Adair	2 nd Priority	Green/Tradewater
Greenbriar Lake	Montgomery	2 nd Priority	Salt/Licking
Guist Creek Lake	Shelby	1 st Priority	Salt/Licking
Hematite Lake	Trigg	1 st Priority	TN/MS/Cumberland
Herrington Lake	Garrard/Boyle/Mercer	TMDL Under Development (1)	Kentucky
Honker Lake	Trigg	Delisted	TN/MS/Cumberland
Jericho Lake	Henry	1 st Priority	Salt/Licking
Kincaid Lake	Henry	2 nd Priority	Salt/Licking
Lake Cumberland	Clinton/Pulaski/Russell/Wayne	2 nd Priority	TN/MS/Cumberland
Lake George	Crittenden	Delisted	Green/Tradewater
-			

Table 2-2 (con't). Alphabetic Listing of 2004 303(d)-Listed Lakes for Kentucky

<u>Lake Name</u>	County	<u>Status</u>	Watershed Unit
Lake Pewee	Hopkins	2 nd Priority	Green/Tradewater
Lake Shelby	Shelby	2 nd Priority	Salt/Licking
Lake Washburn	Ohio	Delisted	Green/Tradewater
Loch Mary Lake	Hopkins	Delisted	Green/Tradewater
Luzerne Lake	Muhlenburg	2 nd Priority	Green/Tradewater
Marion County Sportman Lake	Marion	2 nd Priority	Salt/Licking
McNeely Lake	Jefferson	2 nd Priority	Salt/Licking
Metcalfe County Lake	Metcalfe	Delisted	Green/Tradewater
Metropolis Lake	McCracken	2 nd Priority	TN/MS/Cumberland
Paintsville Reservoir	Johnson/Morgan	2 nd Priority	Big and Little Sandy/Tygarts
Panbowl Lake	Breathitt	1 st Priority	Kentucky
Reformatory Lake	Oldham	Delisted	Salt/Licking
Rough River Lake	Breckinridge/Grayson	2 nd Priority (1), Delisted (1)	Green/Tradewater
Salem Lake	Larue	2 nd Priority	Green/Tradewater
Sand Lick Creek Lake	Fleming	2 nd Priority	Salt/Licking
Scenic Lake	Henderson	2 nd Priority	Green/Tradewater
Spa Lake	Logan	2 nd Priority (3), Delisted (1)	Green/Tradewater
Stanford Reservoir	Lincoln	2 nd Priority	Kentucky
Swan Pond	Ballard	1 st Priority	TN/MS/Cumberland
Sympson Lake	Nelson	Delisted	Salt/Licking
Taylorsville Lake	Spencer	TMDL Approved (1)	Salt/Licking
Wilgreen Lake	Madison	2 nd Priority	Kentucky
Wood Creek Lake	Laurel	2 nd Priority	TN/MS/Cumberland

Section 2.1 Approved Delistings

Note: The specific stream/pollutant combinations listed below are only for the designated uses and pollutants of concern for which delisting requests were approved by EPA Region 4.

Section 2.1.1 Kentucky River Basin Unit

Copper Creek of Dix RiverLincoln/Rockcastle CountiesFrom River Mile 1.5 to 11.8Segment Length: 10.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation
Suspected Sources: Agriculture

In the 1998 303(d) Report Copper Creek was listed as 2nd Priority, RM 0.0 to 11.8 for siltation based on 1994 data. The sampling locations were at RM 0.1 and 2.3. The assessment was carried to the headwaters. A more complete assessment of Copper Creek is now available and is reflected in this listing. The latest assessment shows that RM 0.0 to 1.5 is partially supporting aquatic life because of siltation from agriculture. RM 1.5 to 7.6 is fully supporting of aquatic life based on data from RM 2.3 and 4.4. The reach from RM 7.6 to 11.8 is considered to be Not Assessed.

Eagle Creek of Kentucky RiverCarroll/Gallatin/Owen CountiesFrom River Mile 0.0 to 14.4Segment Length: 14.4

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Nutrients

Suspected Sources: Agriculture

This reach from River Mile 0.0 to 14.4 (14.4 miles), was shown as impaired for pathogens in the 1998 303(d) Report. More recent and detailed watershed monitoring determined that this segment should not be considered as assessed for pathogens. The latest aquatic life use assessment information is that 0.0 to 10.2 fully supports the aquatic life use, and 10.2 to 14.4 is not assessed for aquatic life use. The latter segment was previously listed as impaired for aquatic life.

Eagle Creek of Kentucky River Grant County

From River Mile 27.3 to 34.5 Segment Length: 7.2

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

The reach from River Mile 27.3 to 38.8 (9.5 miles) was shown as impaired in the 1998 303(d) Report. More recent and detailed watershed monitoring determined that this reach should not be considered as assessed.

Eagle Creek of Kentucky River Grant County

From River Mile 34.5 to 38.8 Segment Length: 4.3

Impaired Use(s): Swimming (Partial Support, Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Nutrients

Suspected Sources: Agriculture

The reach from River Mile 27.3 to 38.8 (9.5 miles) was shown as impaired in the 1998 303(d) Report. More recent monitoring data indicated that this reach should be considered as not assessed for both uses.

<u>Laurel Creek of Goose Creek</u> Clay County

From River Mile 2.5 to 5.4 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Ammonia (Unionized), Suspended Solids, Pathogens, and Organic

Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants - Small Flows)

Middle Fork Kentucky River

Leslie County

From River Mile 71.9 to 74.8 Segment Length: 2.9 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)
Pollutant(s): Suspended Solids, Pathogens, and Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources

Red River of Kentucky RiverEstill/Clark/Powell CountiesFrom River Mile 9.5 to 41.1Segment Length: 31.6

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Agriculture, Land Disposal (Onsite Wastewater

Systems – Septic Tanks and/or Straight Pipes)

Citizen data indicated that a problem might still exist on this segment of the main stem of the Red River. Therefore, the stream segment will be monitored further.

Red River of Kentucky RiverMenifee/Wolfe CountiesFrom River Mile 59.9 to 94.2Segment Length: 34.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Silviculture, Land Disposal, Habitat Modification (Other than

Hydromodification) – Removal of Riparian Vegetation and Bank

Modification/Destabilization, Unknown Source

Sand Lick Fork of South Fork Red River Powell County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Resource Extraction (Petroleum Activities)

South Elkhorn Creek of Elkhorn Creek
From River Mile 16.4 to 34.0

Scott/Woodford Counties
Segment Length: 17.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Pesticides

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers, Municipal Point Sources

South Fork Red River of Middle Fork Red River Powell County

From River Mile 0.0 to 10.1 Segment Length: 10.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Resource Extraction (Petroleum Activities)

Section 2.1.2 Salt/Licking River Basin Unit

Buckhorn Creek of Rolling Fork Marion County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Construction (Highway/Road/Bridge)

<u>Cedar Creek of Floyds Fork</u>
From River Mile 0.0 to 15.3

Jefferson/Bullitt Counties
Segment Length: 15.3

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

Fourmile Creek of Ohio River Campbell County

From River Mile 8.4 to 9.4 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Urban Runoff/Storm Sewers

<u>Harrods Creek of the Ohio River</u>
From River Mile 3.2 to 4.0

Jefferson/Oldham Counties
Segment Length: 0.8

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows)

<u>Licking River of Ohio River</u> Morgan County

From River Mile 226.4 to 239.3 Segment Length: 12.9

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources

Little Goose Creek of Goose Creek Jefferson County

From River Mile 0.0 to 8.7 Segment Length: 8.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

Middle Fork Beargrass Creek of Beargrass Creek

Jefferson County

From River Mile 2.3 to 15.2 Segment Length: 12.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Industrial Point Sources, Urban Runoff/Storm

Sewers, Land Disposal, Combined Sewer Overflows, Sanitary Sewer

Overflows

Rolling Fork of Salt RiverBullitt/Hardin/Nelson CountiesFrom River Mile 0.0 to 20.1Segment Length: 20.1

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Agriculture

South Fork Licking River Pendleton/Harrison Counties
From River Mile 11.5 to 27.1 Segment Length: 15.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Agriculture (Grazing-related Sources), Agriculture (Crop-related Sources)

Southern Ditch of Pond Creek Jefferson County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

Section 2.1.3 Tennessee/Mississippi/Cumberland River Basin Unit

Beechy Creek of Blood River Calloway County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Big Lily Creek of Cumberland River (Lake Cumberland)

Russell County

From River Mile 4.7 to 9.1 Segment Length: 4.4 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support)

Pollutant(s): Organic Enrichment/Low DO

Suspected Source: Unknown

A major point source discharge was moved from this creek in 1993.

Buck Creek of Clear Fork Whitley County

From River Mile 1.4 to 2.8 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Turbidity

Suspected Source: Resource Extraction

Central Creek of Truman Creek Carlisle County

From River Mile 0.0 to 0.4 Segment Length: 0.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Chlorine

Suspected Source: Municipal Point Sources

Clarks River of Tennessee River Calloway County

From River Mile 48.4 to 50.9 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Siltation, Nutrients, Pathogens Suspected Sources: Municipal Point Sources, Agriculture (Crop-related Sources)

<u>Little River of Cumberland River (Lake Barkley)</u> Trigg County

From River Mile 23.6 to 33.1 Segment Length: 9.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

Massac Creek of Ohio River McCracken County

From River Mile 0.0 to 10.0 Segment Length: 10.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Nutrients

Suspected Source: Municipal Point Sources (Package Plant - Small Flows)

Whitley Branch of Little Laurel River

Laurel County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Chlorine

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources)

Yellow Creek of Cumberland River

Bell County

From River Mile 8.9 to 18.5 Segment Length: 9.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Urban Runoff/Storm Sewers

Section 2.1.4 Green/Tradewater River Basin Unit

Barren River of Green River Warren County

From River Mile 29.4 to 43.6 Segment Length: 14.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers, Agriculture

This listing was from the 1998 303(d) Report. The listing was an error. Fecal coliform data collected at RM 37.6 during 1996 and 1997 indicated that there was no impairment of the swimming use. The sampling site was subsequently moved far downstream, so no additional information was collected at the site for 1998 – 2000. Some additional fecal coliform data were collected throughout the reach (2001) and indicate that there is no impairment of the swimming use from RM 35.0 to 43.6 and partial support of the swimming use from RM 29.4 to 35.0. Therefore a request to delist the segment from RM 35.0 to 43.6 was submitted to EPA Region 4 with the 2002 303(d) Report and was approved.

Drakes Creek of Pond River Hopkins County

From River Mile 0.0 to 8.5 Segment Length: 8.5

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): PCBs

Suspected Sources: Industrial Point Sources

This listing was from the 1998 303(d) Report. The listing of fish consumption because of PCBs was an error. Drakes Creek in Hopkins County has not been assessed for fish consumption use. A request to delist the stream for PCBs was submitted to EPA Region 4 with the 2002 303(d) Report and was approved. The streams that should have been listed for PCBs are Drakes Creek and West Fork Drakes Creek in Warren and Simpson counties.

<u>Drakes Creek of Pond River</u>

Hopkins County

From River Mile 8.5 to 21.3 Segment Length: 12.8

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): PCBs

Suspected Sources: Industrial Point Sources

This listing was from the 1998 303(d) Report. The listing of fish consumption because of PCBs was an error. Drakes Creek in Hopkins County has not been assessed for fish consumption use. A request to delist the stream for PCBs was submitted to EPA Region 4 with the 2002 303(d) Report and was approved. The streams that should have been listed for PCBs are Drakes Creek and West Fork Drakes Creek in Warren and Simpson counties.

<u>Little Pitman Creek of Big Pitman Creek</u>

Taylor/Green Counties

From River Mile 5.9 to 10.1 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Metals (Copper)

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources)

This listing was from the 1998 303(d) Report. Metals data indicate that copper values are now being met by the Campbellsville WWTP and that instream values of copper meet water quality standards. A request to delist the stream for metals (copper) was submitted to EPA Region 4 with the 2002 303(d) Report and was approved.

Section 2.1.5 Big Sandy/Little Sandy/Tygarts River Basin Unit

None.

Section 2.1.6 Ohio River Main Stem

Ohio River in All Counties Along the Ohio River in

From River Mile 317.1 to 981.0 Kentucky

Impaired Use(s): Fish Consumption (Partial Support) Segment Length: 663.9

Pollutant(s): Chlordane

This listing was from the 1998 303(d) Report. The entire reach of the Ohio River in Kentucky is listed as partially impaired for Priority Organics (chlordane, PCBs, and dioxin). The Food and Drug Administration (FDA) Action Level for chlordane in fish tissue was used (0.30 parts per million - ppm) as the criteria. More recently, Kentucky has adopted the Great Lakes Protocols, which call for the use of risk-based assessments. However, no cancer-risk factor has been delineated for use by Kentucky in the risk-based approach. As a result, Kentucky defers to the FDA Action Level value of 0.30 ppm of chlordane in fish tissue as the criteria for fish consumption for chlordane.

ORSANCO has chlordane data for fish tissue from the Ohio River for the period 1988 to 1999. The data show that levels of chlordane have decreased.

As the entire length of the Ohio River along the Kentucky border is included on the most recent 303(d) list because of PCBs and dioxin, delisting for chlordane will not result in the removal of the fish consumption advisory.

Section 2.1.7 Lakes and Reservoirs

Briggs Lake Logan County

Impaired Use(s): Aquatic Life (Nonsupport) Green/Tradewater River Unit

Pollutant(s): Nutrients Acres: 18

Suspected Sources: Lake Fertilization

Campbellsville City Lake Taylor County

Impaired Use(s): Aquatic Life (Partial Support) Green/Tradewater Unit

Pollutant(s): Nutrients Acres: 63

Honker Lake Trigg County

Impaired Use(s): Aquatic Life (Partial Support) Tenn./Miss./Cumberland River Unit

Pollutant(s): Nutrients Acres: 190

<u>Lake George</u> Crittenden County Impaired Use(s): Aquatic Life (Partial Support) Green/Tradewater Unit

Pollutant(s): Nutrients Acres: 53

Lake Washburn Ohio County

Impaired Use(s): Aquatic Life (Partial Support) Green/Tradewater Unit

Pollutant(s): Nutrients Acres: 26

Loch Mary Lake Hopkins County

Impaired Use(s): Drinking Water Supply Green/Tradewater River Unit

(Nonsupport) Acres: 135

Pollutant(s): Metals (Manganese), Other Inorganics (Noncarbonate Hardness)

Metcalfe County Lake Metcalfe County

Impaired Use(s): Aquatic Life (Nonsupport) Green/Tradewater River Unit

Pollutant(s): Nutrients Acres: 22

Reformatory Lake Oldham County

Impaired Use(s): Aquatic Life (Nonsupport) Salt/Licking River Unit

Pollutant(s): Nutrients Acres: 54

Suspected Sources: Agriculture

Rough River Lake

Breckinridge/Grayson Counties

Impaired Use(s): Drinking Water Supply Green/Tradewater River Unit

(Partial Support) Acres: 5,100

Pollutant(s): Nutrients

This listing was from the 1998 303(d) Report and was an error. The lake has always fully supported the drinking water supply use.

<u>Spa Lake</u> Logan County

Impaired Use(s): Aquatic Life (Partial Support) Green/Tradewater Unit

Pollutant(s): Nutrients Acres: 240

Sympson Lake Nelson County

Impaired Use(s): Drinking Water Supply Salt/Licking River Unit

(Nonsupport) Acres: 184

Pollutant(s): Nutrients

Section 2.2 Delisting Requests

Section 2.2.1 Kentucky River Basin Unit

Note: The specific stream/pollutant combinations listed below are only for the designated uses and pollutants of concern for which a delisting request has been made to EPA Region 4.

Section 2.2.1.1 1st **Priority Listings**

None.

Section 2.2.1.2 2nd Priority Listings

Grassy Run of Eagle Creek Grant County

From River Mile 0.0 to 6.4 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Unknown

This listing appeared in the 2000 305(b) Report. A reevaluation of the assessment was made based on new metrics and the new assessment indicates that the stream fully supports the aquatic life use. Because the stream fully supports the aquatic life use, it should be delisted.

Kentucky River of Ohio River Madison, Fayette, Jessamine, Clark

From River Mile 118.2 to 139.0 Counties

Impaired Use(s): Swimming (Partial Support) Segment Length: 20.8

Pollutant(s): Pathogens
Suspected Sources: Agriculture

This listing is based on data from a site that is no longer sampled and the previous sampling location was determined to not be appropriate for assessing this reach. Data were collected in 1998 at the new site and no impairment was identified.

<u>Kentucky River of Ohio River</u>
From River Mile 190.8 to 201.0

Madison/Estill/Clark Counties
Segment Length: 10.2

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Agriculture

Data collected at a new site in 1998 indicated no impairment for this reach.

Lick Creek of Eagle Creek Carroll County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources – Pasture Grazing, Upland), Land

Disposal (Inappropriate Waste Disposal/Wildcat Dumping),

Hydromodification (Dredging)

This listing appeared in the 2000 305(b) Report. A reevaluation of the assessment was made based on new metrics, and the new assessment indicates that the stream fully supports the aquatic life use.

Section 2.2.2 Salt/Licking River Basin Unit

Section 2.2.2.1 1st Priority Listings

Salt River of Ohio River Anderson County

From River Mile 78.0 to 88.5 Segment Length: 10.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

The latest assessment information indicates that this reach fully supports the swimming use. Therefore, this segment should be delisted as impaired for swimming use because of pathogens.

Section 2.2.2.2 2nd Priority Listings

None.

Section 2.2.3 Tennessee/Mississippi/Cumberland River Basin Unit

Section 2.2.3.1 1st Priority Listings

Ohio River Basin

Bayou Creek of Ohio River
From River Mile 0.0 to 6.5

McCracken County
Segment Length: 6.5

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Thermal Modification, pH

Suspected Sources: Industrial Point Sources, Land Disposal

A compilation of available data is being conducted through a grant from the Department of Energy. As a result of some of that data compilation, pH and thermal modification are no longer pollutants that are causing an aquatic life use and swimming impairment. A request to delist Bayou Creek as impaired for the aquatic life and swimming uses because of pH and thermal modifications was given informal approval by EPA on September 16, 2003.

Upper Cumberland Basin

<u>Bucks Branch of Jellico Creek</u>
From River Mile 0.0 to 2.3

Whitley/McCreary Counties
Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL for low pH was being developed and the data indicated that the water quality standard for pH is being met. A request to delist the stream as being impaired for low pH was informally approved by EPA on November 18, 2003.

Section 2.2.3.2 2nd Priority Listings

None.

Section 2.2.4 Green/Tradewater River Basin Unit

Section 2.2.4.1 1st Priority Listings

Green River Basin

Green River of Ohio River
From River Mile 183.5 to 250.2

Hart/Edmonson/Green Counties
Segment Length: 66.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

The most recent data indicates full support.

Section 2.2.4.2 2nd Priority Listings

Green River Basin

Barren River of Green River Warren County

From River Mile 29.4 to 35.0 Segment Length: 5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Metals (Lead)

Suspected Sources: Urban Runoff/Storm Sewers

The metals violations for lead were just above the chronic level for a number of samples, and the violations are believed to be attributable to contamination of the acid used as preservative for the metals samples. Unfortunately, this listing is based on pre-1998 data (this site was an ambient monitoring site until 1998), but the ambient site is now located far downstream. As a result, no data had been collected at the site since 1998 until just recently. Data collection for metals was initiated in 2001 and ended in 2003. The metals data indicated that there was not a violation of the aquatic life use because of metals. Therefore, a request to delist the segment as being impaired for metals was submitted to EPA Region 4 and the request was given informal approval on September 10, 2003.

Barren River of Green River Warren County

From River Mile 35.0 to 43.6 Segment Length: 8.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Metals (Lead)

Suspected Sources: Urban Runoff/Storm Sewers

The metals violations for lead were just above the chronic level for a number of samples and the violations are believed to be attributable to contamination of the acid used as preservative for the metals samples. Unfortunately, this listing is based on pre-1998 data. This site was an ambient monitoring site until 1998, but the ambient site is now located far downstream. As a result, no data had been collected at the site since 1998 until just recently. Data collection for metals was initiated in 2001 and ended in 2003. The metals data indicated that there was not a violation of the aquatic life use because of metals. Therefore, a request to delist the segment as being impaired for metals was submitted to EPA Region 4, and the request was given informal approval on September 10, 2003. Formal approval will be given when the 2004 303(d) Report is approved.

<u>Green River of Ohio River</u> McLeon/Ohio/Butler/Muhlenburg Cos.

From River Mile 71.3 to 108.6 Segment Length: 37.3

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Agriculture

This listing is from the 1998 303(d) Report. More recent assessment information indicates that this segment is not impaired for the swimming use because of pathogens.

Section 2.2.5 Big Sandy/Little Sandy/Tygarts River Basin Unit

None.

Section 2.2.6 Ohio River Main Stem

Section 2.2.6.1 1st Priority Listings

Ohio River of Mississippi River From River Mile 356.5 to 361.0 Greenup/Lewis Counties Segment Length: 4.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

The most recent assessment information from ORSANCO shows that some of this reach (356.6 - 357.8) fully supports the aquatic life use and other parts (357.8 - 361.0) are considered to be not assessed. (The impaired reach was previously 354.0 - 361.0, but reaches have been re-configured in ORSANCO's assessments. The miles 354.0 - 356.5 were also assessed as fully supporting by ORSANCO in the 2004 305(b) report.)

Section 2.2.6.2 2nd Priority Listings

Ohio River of Mississippi River Bracken/Pendleton/Campbell Counties

From River Mile 436.2 to 462.6 Segment Length: 26.4

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources

The most recent data from ORSANCO shows this reach in full support of swimming use.

Ohio River of Mississippi River

Boone County

From River Mile 498.0 to 510.0 Segment Length: 12.0

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources

The most recent data from ORSANCO shows this reach in full support of swimming use.

Ohio River of Mississippi River Carroll County

From River Mile 545.8 to 553.6 Segment Length: 7.8 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Unknown, Pathogens

Suspected Sources: Unknown, Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land

Disposal, Agriculture, Municipal Point Sources, Industrial Point Sources

The most recent assessment information from ORSANCO shows that this reach fully supports the aquatic life use and swimming uses.

Ohio RiverCarroll/Trimble CountiesFrom River Mile 553.6 to 567.6Segment Length: 4.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

The most recent assessment information from ORSANCO shows that this reach fully supports the aquatic life use.

<u>Ohio River</u>
From River Mile 567.6 to 606.8

Trimble/Oldham/Jefferson Counties
Segment Length: 39.2

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Unknown, Pathogens

Suspected Sources: Unknown, Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land

Disposal, Agriculture, Municipal Point Sources

The most recent assessment information from ORSANCO shows that this reach fully supports the aquatic life use and swimming uses.

Ohio River Jefferson County

From River Mile 609.7 to 617.6 Segment Length: 12.5

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources

The most recent data from ORSANCO indicates full support of swimming use.

Section 2.2.7 Lakes and Reservoirs

None.

Section 2.3 Approved TMDLs

(Please access the KDOW's TMDL web site to view these documents – http://www.water.ky.gov/sw/tmdl/default.htm; or a printed copy of the report can be obtained by contacting the Division of Water.)

Section 2.3.1 Kentucky River Basin Unit

North Fork Kentucky River and Tributaries Breathitt/Lee/Letcher/Perry/Wolfe

From River Mile (main stem) 0.0 to 162.6 Counties

Impaired Use(s): Swimming (Nonsupport) Segment Length: 162.6

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Municipal Point Sources

The TMDL for pathogens for the North Fork Kentucky River and Tributaries is approved; 'Removing Fecal Pollution from the North Fork Kentucky River Basin.' Recent data indicate that the swimming advisory is still warranted for the entire North Fork Kentucky River and a swimming advisory was reissued in 2003. Enforcement activities and WWTP upgrades have resulted in significant improvements in the compliance rate of these facilities for fecal coliform. However, bypasses and straight pipe discharges continue to be a significant source of fecal coliform pollution. The PRIDE Program (Personal Responsibility in a Desirable Environment) has provided a significant amount of money to the watershed for the upgrade of WWTPs and for the removal of straight pipes and failed septic systems.

South Fork Red River of Middle Fork of Red River Powell County

From River Mile 0.0 to 10.1 Segment Length: 10.1

Delisted – see the 2002 303(d) Report for additional information.

Sand Lick Fork of South Fork of Red River Powell County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Delisted - see the 2002 303(d) Report for additional information.

Stump Cave Branch of South Fork of Red River Powell County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Chlorides/Salinity/TDS

Suspected Sources: Resource Extraction (Petroleum Activities)

The TMDL for the above three streams is approved, but South Fork Red River and Sand Lick Fork have been delisted as impaired for aquatic life use because of chlorides/TDS/Salinity based on the latest assessment information. Stump Cave Branch was not assessed because it was not on the 1998 303(d) List, but was included in the approved TMDL.

UT of Baughman Fork (River Mile 2.6) of Boone Creek Fayette County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources

Previously this was erroneously listed as Baughman Fork at River Mile 2.6. The TMDL for nutrients and organic enrichment/low DO is approved and enforcement action has been taken against the Blue Sky WWTP. The case is currently under litigation.

Section 2.3.2 Salt/Licking River Basin Unit

Salt River Basin

<u>Chenoweth Run of Floyds Fork</u>

Jefferson County

From River Mile 0.0 to 9.1 Segment Length: 9.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Nutrients, Noxious Aquatic Plants

Suspected Sources: Municipal Point Sources, Industrial Point Sources, Urban Runoff/Storm

Sewers, Land Disposal, Agriculture (Grazing- related Sources)

The TMDL for nutrients was approved in 1997. The Jeffersontown WWTP was given a total phosphorus limit of 1.0 mg/L starting in November 2000. Phosphorus monitoring at the Jeffersontown WWTP indicates values consistently around 0.5 mg/L. The TMDL also states that riparian zones are needed along the stream and that effective storm water management is also needed. The listing for aquatic life use shown here is carried forward from the 1998 303(d) Report because new biological data are not yet available. The Louisville and Jefferson County Metropolitan Sewer District continues to collect and compile information on the stream.

Floyds Fork Watershed of Salt River
From River Mile 0.0 to 67.0

Jefferson/Bullitt Counties
Segment Length: 67.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Urban

Runoff/Storm Sewers, Agriculture

The TMDL for organic/enrichment/low DO is approved. For a printed copy of the TMDL, please contact the KDOW. MSD has acquired a number of small WWTPs throughout the watershed, which MSD now operates and maintains, and the MSD Floyds Fork Regional WWTP became operational in the summer of 2001. Sewer lines are planned to be run from the areas currently being serviced by the small WWTPs to the Floyds Fork Regional WWTP. As these connections are made, the small WWTPs will be taken out of service. This will improve water quality throughout the watershed because small WWTPs are difficult to maintain and will work less efficiently than the new Floyds Fork Regional WWTP. The Floyds Fork Regional WWTP has a phosphorus limit of 1.0 mg/L, which is a significant reduction compared to the small WWTPs that currently operate in the watershed. The discharge from the small WWTPs generally contains 2.5 to 4.0 mg/L of phosphorus.

Licking River Basin

Fleming Creek Watershed of Licking River
From River Mile 0.0 to 39.2

Fleming/Nicholas Counties
Segment Length: 39.2

and includes 10 tributaries

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources), Municipal Point Sources

The TMDL for pathogens is approved.

The stream segments included in the TMDL are:

Allison Creek River Mile 0.0 to 4.7
Craintown Branch River Mile 0.0 to 3.5
Doty Creek River Mile 0.0 to 4.0
Fleming Creek River Mile 0.0 to 39.2
Sleepy Run River Mile 0.0 to 2.8
Town Branch River Mile 0.0 to 4.0
Wilson Run River Mile 0.0 to 5.5

4 other stream segments that were not included on the 1998 303(d) list for pathogens:

Logan RunRiver Mile 0.0 to 2.3Cassidy CreekRiver Mile 0.0 to 3.9Poplar CreekRiver Mile 0.0 to 3.1UT to Fleming Creek at RM 4.28River Mile 0.0 to 2.2

Ohio River Basin

Elijahs (and Gunpowder) Creek of Ohio River

Boone County

Elijahs - From River Mile 0.0 to 5.2 Segment Length: 5.2 Gunpowder - From River Mile 15.7 to 18.9 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nonpriority Organics (De-icing Fluids)

Suspected Sources: Industrial Point Sources

The TMDL for nonpriority organics is approved. Elijahs and Gunpowder Creeks are severely impacted by de-icing fluids used at the Cincinnati/Northern Kentucky International Airport. Headwater portions of these streams are located on airport property. The streams then flow through rapidly developing areas prior to discharging to the Ohio River. This TMDL project focused on studying the impact the deicing fluids are having upon aquatic life, the reductions needed to restore the aquatic life use to these streams, and working with the airport to bring about the needed reductions. Water quality modeling was used to establish effluent limits that would be protective of water quality. These limits were incorporated into a new discharge permit for the airport and went into effect April 1, 1997. Fines for past violations were levied against the airport, and additional control measures were required through enforcement action that culminated in an Agreed Order with the airport, filed March 28, 1997. The airport is still having difficulty meeting the permit limits for 5-day Biochemical Oxygen Demand (BOD), but efforts continue by the airport to come into compliance. An aeration system has been installed on Elijahs Creek and the BOD values have been decreasing with time. Quarterly meetings are held between Airport officials, SD #1 and the KDOW. The airport has installed de-icing pads where planes are sprayed and the excess drains to a pit. This material goes to a SD #1 treatment facility. Plans are underway to recycle the fluid that goes to the pit. The airport also uses sweeper trucks to capture deicing fluid shed from planes while taxiing.

Harrods Creek of the Ohio RiverJefferson/Oldham CountiesFrom River Mile 0.0 to 3.2Segment Length: 3.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows)

The TMDL for organic/enrichment/low DO is approved. MSD is operating and maintaining five small WWTPs that discharge to the lower section of Harrods Creek. This section of Harrods Creek is essentially a backwater embayment of the Ohio River. This section of Harrods Creek is characterized by slow stream velocities and depths greater than typical of pool and riffle stream environments. This results in low DO values, and the condition can be exacerbated by the discharges from the small WWTPs if the WWTPs are not in compliance. The discharge from these five WWTPs will eventually be incorporated into MSD's Regional Wastewater System. The latest assessment indicates that the reach from RM 3.2 to 4.0 fully supports the aquatic life designated use, and a request to delist it was approved by EPA.

Section 2.3.3 Tennessee/Mississippi/Cumberland River Basin Unit

Upper Cumberland River Basin

Upper Cumberland River Watershed Pathogens TMDL

The stream segments listed below are included in the EPA Region 4 approved TMDL, *Removing Fecal Pollution from the Upper Cumberland River Basin*. They are all categorized as follows:

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes), Municipal Point Sources

(1) Bailey Creek of Clover Fork	Harlan County	
From River Mile 0.0 to 2.5	Segment Length:	2.5
(2) Catron Creek of Martins Fork	Harlan County	
From River Mile 0.0 to 8.5	Segment Length:	8.5
(3) Clover Fork of Poor Fork	Harlan County	
From River Mile 0.0 to 34.5	Segment Length:	34.5
(4) Cloverlick Creek of Poor Fork	Harlan County	
From River Mile 0.0 to 5.0	Segment Length:	5.0
(5) Cumberland River of Tennessee River	Harlan County	
From River Mile 684.9 to 694.2	Segment Length:	9.3
(6) Cumberland River of Tennessee River	Bell County	
From River Mile 650.6 to 654.5	Segment Length:	3.9
(7) Greasy Creek of Cumberland River	Bell County	
From River Mile 0.0 to 11.4	Segment Length:	11.4
(8) Left Fork Straight Creek	Bell County	
From River Mile 0.0 to 13.0	Segment Length:	13.0
(9) Looney Creek of Poor Fork	Harlan County	
From River Mile 0.0 to 5.5	Segment Length:	5.5
(10) Martins Fork of Cumberland River	Harlan County	
From River Mile 0.0 to 7.1	Segment Length:	7.1
(11) Martins Fork of Cumberland River	Harlan County	
From River Mile 7.1 to 10.1	Segment Length:	3.0
(12) Poor Fork of Cumberland River	Harlan/Letcher Counties	
From River Mile 0.0 to 25.1	Segment Length:	25.1

(13) Puckett Creek of Cumberland River Harlan/Bell Counties From River Mile 0.0 to 10.0 Segment Length: 10.0 (14) Richland Creek of Cumberland River **Knox County** Segment Length: From River Mile 0.0 to 19.6 19.6 (15) Straight Creek of Cumberland River Harlan/Bell Counties From River Mile 0.0 to 23.5 Segment Length: 23.5 (16) Yocum Creek of Clover Fork Harlan County Segment Length: From River Mile 0.0 to 6.5 6.5

Ohio River Basin

<u>Little Bayou Creek of Bayou Creek</u>
From River mile 0.0 to 6.5

McCracken County
Segment Length: 6.5

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): PCBs

Suspected Sources: Industrial Point Sources, Hydromodification

Section 2.3.4 Green/Tradewater River Basin Unit

Green River Basin

Brier Creek of Pond River
From River Mile 0.0 to 4.7

Muhlenburg County
Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

<u>Cane Run of Caney Creek</u>
From River Mile 0.0 to 3.4

Hopkins County
Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL was approved by EPA Region 4 on January 7, 2004.

Craborchard Creek of Drakes Creek Hopkins County

From River Mile 0.0 to 7.6 Segment Length: 7.6

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL was approved by EPA Region 4 on January 7, 2004.

Pleasant Run of Drakes Creek Hopkins County

From River Mile 0.0 to 7.9 Segment Length: 7.9

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL was approved by EPA Region 4 on January 7, 2004.

<u>Sugar Creek of Clear Creek</u> Hopkins County

From River Mile 0.0 to 5.3 Segment Length: 5.3

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL was approved by EPA Region 4 on January 7, 2004.

UT of South Fork Russell Creek of Russell Creek Green County

From River Mile 0.0 to 0.6 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Resource Extraction (Petroleum Activities)

This listing was in the 1998 303(d) Report as South Fork Russell Creek. It should have been listed as UT to South Fork Russell Creek (at River Mile 4.85).

Section 2.3.5 Big Sandy/Little Sandy/Tygarts River Basin Unit

Little Sandy River Basin

East Fork Little Sandy River Boyd County

From River Mile 19.0 to 25.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO
Suspected Sources: Municipal Point Sources

This TMDL was approved in 1995. Most of the small WWTPs whose flow impacted this stream segment have been eliminated. The flow now goes to regional facilities on the Ohio River.

Newcombe Creek of Little Sandy River Elliott County

From River Mile 0.0 to 11.9 Segment Length: 11.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/Chlorides/TDS

Suspected Sources: Resource Extraction (Petroleum Activities)

Section 2.3.6 Ohio River Main Stem

None.

Section 2.3.7 Lakes and Reservoirs

Taylorsville Lake Salt/Licking River Unit

Spencer County Acres: 3,050

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients

Suspected Sources: Agriculture, High Phosphorus Content in Soils

The TMDL contains information that phosphorus values at a stream site just upstream of the lake have been decreasing over the past ten years. A number of BMPs have been installed throughout the watershed upstream of the lake to reduce the amount of phosphorus that enters the Salt River (and eventually Taylorsville Lake).

Section 2.4 TMDLs Under Development

Section 2.4.1 Kentucky River Basin Unit

Eagle Creek Watershed Pathogens TMDL

Eagle Creek of Kentucky River

River Mile 14.4 to 27.3 (Two Mile Cr to Ten Mile Cr)

Owen/Gallatin/Grant Counties
Segment Length: 12.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

Assessments were made throughout the Eagle Creek watershed in 1998. Eagle Creek, from River Mile 0.0 to 38.8, was listed as 2nd Priority in the 1998 303(d) Report for partial support of swimming (pathogens) and aquatic life (nutrients) uses based on data from the ambient water quality monitoring site at River Mile 21.6. That assessment is no longer relevant because of the new and more detailed assessment information. A 104(b)3 Grant through EPA Region 4 was awarded in June 2001 to the Tracy Farmer Center for the Environment to develop this pathogens TMDL. The project is titled; Diagnostic Watershed Model for Pathogen Speciation and Mitigation. The project will investigate the use various techniques to identify the source of pathogen impairment in addition to developing the pathogens TMDL. A TMDL for pathogens for Eagle Creek is currently under development. Detailed data for use in the development of the TMDL were collected during the summers of 2002 and 2003, and a comprehensive HSPF model has been developed. It is anticipated that the TMDL for these streams will be completed by June 2004.

Town Branch/South Elkhorn Creek Nutrient TMDL

The Individual Assessments Related to this TMDL are:

(1) Town Branch of South Elkhorn Creek Fayette County

From River Mile 0.0 to 11.3 Segment Length: 11.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Agriculture (Grazing-related Sources) – RM 0.0 to 8.8, Municipal Point

Sources - RM 0.0 to 10.3, Urban Runoff/Storm Sewers - RM 0.0 to 11.3

This listing for aquatic life replaces the 1998 303(d) listing, which showed Town Branch as being in nonsupport of the aquatic life designated use. See 1st Priority Listings.

(2) South Elkhorn Creek of Elkhorn Creek Scott/Woodford Counties
From River Mile 16.4 to 34.0 Segment Length: 17.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers, Municipal Point Sources

This listing for nutrients was included in the 1998 303(d) Report (2nd Priority). The 2000 305(b) Report showed that this reach fully supported the designated uses of aquatic life (based on 1998 assessment data). However, the metrics that the Water Quality Branch has been using to assess aquatic life use are being redefined based on ecological regions. As a result, this reach of South Elkhorn Creek was changed in the 2000 305(b) Report from fully supporting to partially supporting the aquatic life use. The cause has been identified as nutrients. Therefore, South Elkhorn Creek cannot be formally delisted for nutrients. As part of a 104(b)3 contract, the Kentucky Water Resources Research Institute is developing the TMDL for nutrients for Town Branch and for this portion of South Elkhorn Creek below Town Branch based on the 1998 303(d) listing. The nutrient TMDL has been submitted to EPA Region 4 for informal approval.

A TMDL for pathogens for South Elkhorn Creek (including Town Branch and Wolf Run) is currently under development. Detailed data for use in the development of the TMDL were collected during the summers of 2002 and 2003, and a comprehensive HSPF model has been developed for each of the watersheds. It is anticipated that the TMDL for these streams will be completed by June 2004.

A similar TMDL for Cane Run is also under development. Final completion of this TMDL has been delayed due to the extensive karst influences in the watersheds that have necessitated more advanced modeling efforts and subsequent data collection.

Town Branch/Wolf Run/S Elkhorn Creek/Cane Run Pathogens TMDL

The Individual Assessments related to this TMDL are:

(1) Town Branch of South Elkhorn Creek Fayette County

From River Mile 0.0 to 11.3 Segment Length: 11.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources) – RM 0.0 to 8.8, Municipal Point

Sources - RM 0.0 to 10.3, Urban Runoff/Storm Sewers - RM 0.0 to 11.3

(2) Wolf Run of Town Branch Fayette County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers

(3) Cane Run of North Elkhorn Creek Fayette/Scott Counties
From River Mile 9.6 to 17.4 Segment Length: 7.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers, Agriculture (Grazing-related Sources)

(4) South Elkhorn Creek of Elkhorn Creek
From River Mile 16.4 to 34.0

Scott/Woodford Counties
Segment Length: 17.6

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers, Municipal Point Sources

Elkhorn Creek of Kentucky River Franklin County

From River Mile 0.0 to 17.8 Segment Length: 17.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

The 1998 303(d) Report showed this stream segment as partially supporting swimming use. The current listing makes the 1998 303(d) listing no longer relevant. Data are currently being collected at five sites along the stream reach for TMDL development.

The following streams were targeted for TMDL monitoring as defined in the 2003 Monitoring Plan for the KDOW. These streams were selected based largely on a priority ranking by the Kentucky River Basin Team. Monitoring will be conducted during the period April 2003 through February 2004 with TMDL development planned to occur over the two-year period following data collection. The following streams are included in this effort:

Baughman Fork of Boone Creek Fayette County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing – Riparian and/or

Upland), Municipal Point Sources (Package Plants - Small Flows)

Benson Creek of the Kentucky River Franklin County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Habitat Alteration

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification)

The KDOW is currently involved in collecting suspended sediment and stream morphology information on streams in the Benson Creek watershed. Data and information are currently (April 2003 to February 2004) being collected to produce a nutrient and siltation TMDL for the Benson Creek Watershed.

Benson Creek of Kentucky River Franklin County

From River Mile 4.6 to 6.7 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff),

Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes) Habitat Modification (Other than Hydromodification)

The KDOW is currently involved in collecting suspended sediment and stream morphology information on streams in the Benson Creek watershed. Data and information are currently (April 2003 to February 2004) being collected to produce a nutrient and siltation TMDL for the Benson Creek Watershed.

Benson Creek of the Kentucky River Franklin County

From River Mile 6.7 to 13.4 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alteration, Nutrients

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff),

Land Disposal (Onsite Wastewater Systems – Septic and/or Straight Pipes)

Habitat Modification (Other than Hydromodification)

The 2002 303(d) Report should have included nutrients. Data and information are currently (April 2003 to February 2004) being collected to produce a nutrient and siltation TMDL for the Benson Creek Watershed. The KDOW is currently involved in collecting suspended sediment and stream morphology information on streams in the Benson Creek watershed. Initial indications are that the siltation is being produced near the headwaters of the stream.

Boone Creek of Kentucky River Fayette/Clark Counties
From River Mile 0.0 to 7.4 Segment Length: 7.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Agriculture (Grazing-related Sources), Municipal Point Sources (Package

Plants - Small Flows)

Data and information were collected April 2003 to February 2004 to produce a nutrient and pathogens TMDL for the Boone/Baughman Creek Watershed.

Boone Creek of Kentucky River
From River Mile 7.4 to 12.6

Fayette/Clark Counties
Segment Length: 5.2

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Nutrients

Suspected Sources: Agriculture (Grazing-related Sources)

Data and information were collected April 2003 to February 2004 to produce a nutrient and pathogens TMDL for the Boone/Baughman Creek Watershed.

<u>East Hickman Creek of Hickman Creek</u> Fayette County

From River Mile 4.2 to 10.2 Segment Length: 6.0

Impaired Use(s): Swimming (Nonsupport), Aquatic life (Partial Support)

Pollutant(s): Pathogens, Nutrients

Suspected Sources: Urban Runoff/Storm Sewers, Agriculture (Grazing-related Sources)

Data and information were collected April 2003 to February 2004 to produce a nutrient and pathogens TMDL for the East Hickman Creek Watershed.

East Hickman Creek of Hickman Creek Fayette County

From River Mile 12.6 to 14.0 Segment Length: 1.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers

Data and information were collected April 2003 to February 2004 to produce a nutrient and pathogens TMDL for the East Hickman Creek Watershed.

Goose Creek of Benson Creek Shelby County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alteration (Other than Flow), Unknown

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification), Urban

Runoff/Storm Sewers (Highway/Road/Bridge Runoff)

Data and information were collected April 2003 to February 2004 to produce a nutrient and siltation TMDL for the Benson Creek Watershed.

Goose Creek of Benson Creek Shelby County

From River Mile 1.9 to 4.2 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland)

Data and information were collected April 2003 to February 2004 to produce a nutrient and siltation TMDL for the Benson Creek Watershed.

Hickman Creek of Kentucky River

Jessamine County

From River Mile 0.0 to 25.0 Stream Segment: 25.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Agriculture (Grazing-related Sources), Urban Runoff/Storm Sewers

Data were collected in 2003-2004 to develop a TMDL.

<u>Lower Howard Creek of Kentucky River</u>

Clark County

From River Mile 2.7 to 6.2 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Unknown, Agriculture (Grazing-related Sources), Hydromodification

(Upstream Impoundment)

A reevaluation of the assessment was made and it was deemed that the lower end of the impaired segment should be at River Mile 2.6. Data and information were collected April 2003 to February 2004 to produce a nutrient and organic enrichment/low dissolved oxygen TMDL for the Lower Howard Creek Watershed.

McConnell Run of North Fork Elkhorn Creek Scott County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing – Riparian and/or

Upland)

Data and information were collected April 2003 to February 2004 to produce a nutrient and siltation TMDL for the McConnell Run Watershed.

North Benson Creek of Benson Creek Franklin County

From River Mile 0.8 to 2.0 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Construction, Urban Runoff/Storm Sewers

(Highway/Road/Bridge Runoff)

Data and information were collected April 2003 to February 2004 to produce a siltation and organic enrichment/low DO (more appropriately defined as nutrients) TMDL for the North Benson Creek of Benson Creek Watershed.

North Fork North Benson Creek Franklin County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other than Flow)
Suspected Sources: Agriculture, Construction (Land Development, Habitat Modification (Other

than Hydromodification) - Removal of Riparian Vegetation

This listing appeared in the 2000 305(b) Report. A reevaluation of the assessment was made based on new metrics and the reevaluation indicates that the assessment should be deemed inconclusive. The stream will be included in the 2004 303(d) Report until further data are collected.

<u>Potter Fork of Boone Fork</u> Letcher County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes)

EPA is in the review process of allocating \$1.5 Million to Fleming-Neon for sewer lines for several basins, including Potter Fork. There is also apparently PRIDE, COE, and state revolving fund monies that are targeted for the project. All sources of funding will result in \$3.5 Million for this effort. There is apparently a two-year time horizon for this effort.

Data were collected April 2003 to February 2004 to produce an organic enrichment/low dissolved oxygen TMDL. It may be more appropriately defined as a nutrient TMDL) for the Potter Creek Watershed. This data will in effect act as pre-BMP data for the watershed. Once the area has been sewered, and allowing for some time for stream recovery, follow-up biological monitoring would be done to assess the stream for aquatic life use. Water quality monitoring would also be appropriate to define nutrient levels in the stream, particularly during low-flow conditions.

Swift Camp Creek of Red River Wolfe County

From River Mile 0.0 to 13.6 Segment Length: 13.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Data and information were collected April 2003 to February 2004 to attempt to define the cause of the impairment and to produce a siltation and/or nutrient TMDL for the Swift Camp Creek watershed if appropriate.

Tate Creek of Kentucky River Madison County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources), Agriculture

(Crop-related Sources), Agriculture (Grazing-related Sources)

Data and information were collected April 2003 to February 2004 to produce a nutrient and organic enrichment/low dissolved oxygen TMDL for the Tate Creek Watershed.

<u>UT of Swift Camp Cr at River Mile 11.7</u> Wolfe County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Urban Runoff/Storm Sewers (Erosion and Sedimentation), Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight Pipes)

Data and information were collected April 2003 to February 2004 to produce a siltation TMDL.

West Hickman Creek of Hickman Creek

Jessamine County

From River Mile 0.0 to 3.0 Segment Length: 3.0 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Nutrients, Pathogens

Suspected Sources: Urban Runoff/Storm Sewers, Municipal Point Sources (Major Municipal

Point Sources)

The Lexington/West Hickman WWTP is located at the upstream end of this segment. As of August 2001, the Lexington/West Hickman WWTP has an effluent limit of 1.0 mg/L for total phosphorus as a monthly average for the period May through October. This should improve conditions in the stream with respect to nutrients. Data and information were collected April 2003 to February 2004 to produce a pathogens, nutrient, and siltation TMDL for West Hickman Creek.

West Hickman Creek of Hickman CreekJessamine/Fayette CountyFrom River Mile 3.0 to 8.6Segment Length:5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alteration (Other than Flow)

Suspected Sources: Urban Runoff/Storm Sewers

Data and information were collected April 2003 to February 2004 to produce a nutrient, siltation, and pathogens TMDL for West Hickman Creek.

Section 2.4.2 Salt/Licking River Basin Unit

Salt River Basin

Brooks Run Watershed Nutrient, Pathogens, and Organic Enrichment/Low DO TMDL

Bullitt County From RM 0.0 to 6.1 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Pathogens

Sources: Municipal Point Sources (Package Plants – Small Flows)

This listing is from the 1998 303(d) Report. The TMDL for organic enrichment/low DO and pathogens has been submitted to EPA Region 4 for formal approval. A Bullitt County Sanitation Board has been established and the County has purchased three of the small package WWTPs that had some of the poorest records. The development of the Sanitation Board and the purchase of a number of WWTPs in the watershed are first steps in the regionalization of wastewater treatment in the area. The area has seen tremendous growth in recent years, and this growth is projected to continue. The area is just south of Louisville and Jefferson County.

<u>Mussin Branch of Moore Creek</u> Marion County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): pH

Suspected Sources: Construction (Highway/Road/Bridge Construction)

This stream was listed in the 1998 303(d) Report as partially supporting aquatic life and swimming, but is now considered to be in nonsupport. A pH value of 2.7 and 2.9 was recorded during low-flow periods, prompting the change. Disturbed shale from road construction activities has resulted in low pH in this stream. The Kentucky Transportation Cabinet has been contacted concerning this problem. Data collection and TMDL development are currently being done using EPA Region 4 104(b)3 funds.

Bullitt County

UT of Brooks Run at River Mile 4.1

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)
Pollutant(s): Pathogens, Organic Enrichment/Low DO, Nutrients
Suspected Sources: Municipal Point Sources (Package Plants – Small Flows)

The TMDL for pathogens and organic enrichment/low DO was resubmitted to EPA Region 4 for informal approval. A Bullitt County Sanitation Board was established and the county purchased three small package WWTPs that had some of the poorest records. The development of the Sanitation Board and the purchase of a number of WWTPs in the watershed are first steps in the regionalization of wastewater treatment in the area. The area has seen tremendous growth in recent years, and this growth is projected to continue. The area is just south of Louisville and Jefferson County.

<u>UT of Rolling Fork at River Mile 94.6</u> Marion County

From River Mile 0.0 to 0.6 Segment Length: 0.6

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): pH

Suspected Sources: Construction (Highway/Road/Bridge Construction)

This stream was listed in the 1998 303(d) Report as partially supporting aquatic life and swimming, but is now considered to be in nonsupport. A pH value of 4.6 was recorded during a low-flow period, prompting the change. Disturbed shale from road construction activities has resulted in low pH in this stream. The Kentucky Transportation Cabinet has been contacted concerning this problem. Data collection and TMDL development are currently being done using EPA Region 4 104(b)3 funds.

Licking River Basin

Fleming Creek Watershed Nutrient and Organic Enrichment/Low DO TMDL

The TMDLs for nutrients and/or organic enrichment/low DO are currently under development by an EPA contractor using EPA Region 4 FFY2000 104(b)3 set-aside funds

(1) Allison Creek of Fleming Creek Fleming County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients (Phosphorus), Organic Enrichment/Low DO

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

This listing is from the 1998 303(d) Report. The TMDL for pathogens is approved. See Salt/Licking River Unit – Approved TMDLs – Fleming Creek Watershed.

(2) Craintown Branch of Fleming Creek Fleming County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Nutrients (Phosphorus)

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

(3) Doty Creek of Fleming Creek Fleming County

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or

Upland), Agriculture (Intensive Animal Feeding Operations and Grazing-

related Sources)

(4) Fleming Creek of Licking River Fleming County

From River Mile 0.0 to 39.2 Segment Length: 39.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients (Phosphorus), Organic Enrichment/Low DO

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources), Municipal Point Sources

(5) Logan Run of Fleming Creek Fleming County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

Section 2.4.3 Tennessee/Mississippi/Cumberland River Basin Unit

Upper Cumberland Basin

Cane Branch of Middle Fork (Beaver Creek)

McCreary County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL for low pH is currently under development using EPA Region 4 FFY2001 104(b)3 grant funds. EPA has commented and informally approved. KDOW staff incorporated EPA recommendations.

Copperas Fork of Cooper Creek McCreary County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage).

The TMDL for low pH is currently under development using EPA Region 4 FFY2001 104(b)3 grant funds. EPA has commented and informally approved. KDOW staff incorporated EPA recommendations.

Rock Creek of South Fork Cumberland River McCreary County

From River mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage).

The latest assessment information indicates that the stream reach has improved to partially supporting of the aquatic life and swimming uses. This is a result of the intensive remediation effort that is taking place by the Department of Surface Mining Reclamation and Enforcement (Division of Abandoned Mine Lands) in the White Oak Creek watershed, which drains to Rock Creek at RM 4.1. The TMDL for low pH for Rock Creek (which will include White Oak Creek) has been informally approved.

<u>Ryans Creek of Jellico Creek</u>
From River Mile 0.0 to 5.3

McCreary/ Whitley County
Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Source: Resource Extraction (Acid Mine Drainage).

The TMDL for low pH has been informally approved.

White Oak Creek of Rock Creek McCreary County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): pH

Suspected Source: Resource Extraction

The TMDL for low pH for Rock Creek (which will include White Oak Creek) is currently under development using EPA Region 4 FFY2001 104(b)3 grant funds. EPA has commented and informally approved. KDOW staff incorporated EPA recommendations.

Wildcat Branch of Cumberland River Pulaski County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Low pH

Suspected Source: Resource Extraction (Acid Mine Drainage)

The TMDL for low pH is currently under development using EPA Region 4 FFY2001 104(b)3 grant funds. EPA has commented and informally approved. KDOW staff incorporated EPA recommendations.

Section 2.4.4 Green/Tradewater River Basin Unit

Green River Basin

Beech Creek of Pond Creek
From River Mile 0.0 to 3.4

Muhlenburg County
Segment Length: 3.4

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

Data collection was done by KDOW personnel. The Tracy Farmer Center for the Environment is currently developing the TMDL as part of the EPA FFY2001 104(b)3 Grant awarded to Kentucky.

<u>Butchers Branch of Blackford Creek</u> Hancock County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

Data collection was done by KDOW personnel. The Tracy Farmer Center for the Environment is currently developing the TMDL as part of the EPA FFY2001 104(b)3 Grant awarded to Kentucky.

Cypress Creek of Pond River Muhlenburg County

From River Mile 22.9 to 25.0 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

Data collection and TMDL development are being done by the Tracy Farmer Center for the Environment using FFY2001 319 Assessment Grant funding. This TMDL is being combined with the TMDL for the Cypress Creek from RM 25.0 to 33.3.

<u>Cypress Creek of Pond River</u>
From River Mile 25.0 to 33.3

Muhlenburg Counties
Segment Length: 8.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

Data collection and TMDL development are being done by the Tracy Farmer Center for the Environment using FFY2001 319 Assessment Grant funding. This TMDL is being combined with the TMDL for the Cypress Creek reach from RM 22.9 to 25.0.

<u>Drakes Creek of Pond River</u> Hopkins County

From River Mile 0.0 to 8.5 Segment Length: 8.5

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

Data collection and TMDL development for pH are being done by the Tracy Farmer Center for the Environment using FFY2001 319 Assessment Grant funding. Information collected as part of the TMDL development indicates that most of this main stem reach is not impaired for low pH. There were only sporadic exceedances that occurred immediately below selected tributaries. Remediation of a large section of the watershed has been completed, including grading, limestone layering, topsoiling, seeding, and placing hay bails to limit sediment runoff. The tributary from this area has been stabilized and lined with limestone aggregate.

Flat Creek of Pond River Hopkins County

From River Mile 0.0 to 10.6 Segment Length: 10.6

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL is currently being developed by the Kentucky Water Resources Research Institute.

Pond Creek of Green River Muhlenburg County

From River Mile 9.4 to 23.8 Segment Length: 23.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL is currently being developed by the Kentucky Water Resources Research Institute.

Render Creek of Lewis Creek Ohio County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The Tracy Farmer Center for the Environment is currently developing the TMDL as part of the EPA FFY2001 104(b)3 Grant awarded to Kentucky.

Section 2.4.5 Big Sandy/Little Sandy/Tygarts River Basin Unit

Although Kentucky does not have any TMDLs currently under development in the Big and Little Sandy/Tygarts Unit, West Virginia does have a TMDL that is being developed for the Tug Fork from RM 0.0 to 58.8 for iron and aluminum. The results of the TMDL affect Kentucky because the Tug Fork is a shared waterbody between West Virginia and Kentucky for this segment.

Section 2.4.6 Ohio River Main Stem

None.

Section 2.4.7 Lakes and Reservoirs

<u>Herrington Lake</u> Kentucky River Unit

Garrard/Boyle/Mercer Counties Acres: 2,940

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Nutrients Suspected Sources: Municipal Point Sources, Agriculture

This listing is from the 1998 303(d) Report. A report defining phosphorus loads and sources was produced by the U.S. Geological Survey (USGS), *Modeling Hydrodynamic and Water Quality in Herrington Lake, Kentucky*, USGS Water Resources Investigations Report 99-4281. However, the lake model was calibrated using data from a hydrologically wet year. This resulted in exceptionally high phosphorus loadings, such that even significant reductions in loading resulted in only a minor improvement in lake water quality. Ideally, modeling is done using data representing various hydrologic conditions to better assess the effects of load reductions on lake water quality. Additional modeling for other flow conditions is planned.

Section 2.5 2004 303(d) Listings

Section 2.5.1 Kentucky River Basin Unit

Section 2.5.1.1 1st Priority Listings

Balls Fork of Troublesome Creek Knott County

From River Mile 8.3 to 11.3 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland), Urban Runoff/Storm Sewers (Erosion and Sedimentation)

A reevaluation of the assessment based on new metrics indicated that this stream is in nonsupport of the aquatic life use and not partial support (as was indicated in the 2000 305(b) Report).

Benson Creek of the Kentucky River Franklin County

From River Mile 6.7 to 13.4 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alteration, Nutrients

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff),

Land Disposal (Onsite Wastewater Systems – Septic and/or Straight Pipes)

Habitat Modification (Other than Hydromodification)

See TMDLs Under Development.

Big Willard Creek of North Fork Kentucky River Perry County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Habitat Alteration, Flow Alterations, Total Dissolved

Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Boone Creek of Kentucky River Fayette/Clark Counties

From River Mile 7.4 to 12.6 Segment Length: 5.2 Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Nutrients

Suspected Sources: Agriculture (Grazing-related Sources)

See TMDLs Under Development.

Buck Run of Eagle Creek Owen County

From River Mile 0.0 to 0.9 Segment Length: 0.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Siltation, Noxious Aquatic Plants

Suspected Sources: Agriculture (Grazing-related Sources – Pasture Grazing, Riparian and/or

Upland)

The original assessment was made in August of 1998 and identified the entire reach as being impaired. A field reconnaissance of this site was conducted on September 18, 2001 to determine the extent of the impairment. The impairment is only in the lower end of the watershed, from River Mile 0.0 to 0.9.

Buckhorn Creek of Troublesome Creek Breathitt County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Partial Support)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration (Other than Flow),

Total Dissolved Solids, Pathogens

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian Vegetation and Bank Modification/Destabilization, Land Disposal (Onsite

Wastewater Systems – Septic Tanks and/or Straight Pipes)

Cane Creek of North Fork Kentucky River

Breathitt County

From River Mile 0.0 to 9.5 Segment Length: 9.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Municipal Point Sources

See Approved TMDLs-North Fork Kentucky River and tributaries.

Cane Creek of Red River Powell County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources)

<u>Cane Run of North Elkhorn Creek</u> Scott County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Grazing-related Sources – Pasture Grazing - Riparian and/or

Upland), Agriculture (Crop-related Sources – Nonirrigated Crop Production),

Hydromodification (Flow Altered by Bridge).

<u>Cane Run of North Elkhorn Creek</u> Scott County

From River Mile 3.0 to 9.6 Segment Length: 6.6

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Nutrients, Siltation

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Land Disposal,

Agriculture (Grazing-related Sources), Construction (Highway/Road/Bridge

Construction)

<u>Cane Run of North Elkhorn Creek</u> Fayette/Scott Counties

From River Mile 9.6 to 17.4 Segment Length: 7.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Pathogens

Suspected Sources: Urban Runoff/Storm Sewers, Agriculture (Grazing-related Sources)

The 1998 303(d) Report listed the segment from 10.0 to 17.4 as impaired. A Federal Fiscal Year 2001 319 Assessment Grant to develop the pathogens TMDL was approved by all parties and data collection has been completed. The grant was awarded to the Kentucky Water Resources Research Institute. See Kentucky River Unit – TMDLs Under Development – Town Branch/Wolf Run/ South Elkhorn Creek/Cane Run Pathogens TMDL. Detailed data for use in the development of the TMDL were collected during the summers of 2002 and 2003, and a comprehensive HSPF model has been developed for each of the watersheds. It is anticipated that the TMDL for these streams will be completed by June 2004. Final completion of this TMDL has been delayed due to the extensive karst influences in the watersheds which have necessitated more advanced modeling efforts and additional data collection.

<u>Carr Fork of North Fork Kentucky River</u> Perry County

From River Mile 0.0 to 8.9 Segment Length: 8.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Municipal Point Sources

See Approved TMDLs-North Fork Kentucky River and tributaries.

Clarks Run of Dix River Boyle County

From River Mile 4.3 to 6.6 Segment Length: 2.3

Impaired Use(s): Aquatic life (Nonsupport)

Pollutant(s): Pesticides, Organic Enrichment/Low DO

Suspected Sources: Urban Runoff/Storm Sewers, Municipal Point Sources (Major Municipal

Point Sources – Dry or Wet Weather)

Dix River of Kentucky River Garrard County

From River Mile 33.0 to 36.0 Segment Length: 3.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

<u>Eagle Creek of Kentucky River</u>
River Mile 14.4 to 27.3

Owen/Gallatin/Grant Counties
Segment Length: 12.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

See TMDLs Under Development for Pathogens and Approved Delistings for Nutrients.

<u>East Hickman Creek of Hickman Creek</u> Fayette County

From River Mile 4.2 to 10.2 Segment Length: 6.0

Impaired Use(s): Swimming (Nonsupport), Aquatic life (Partial Support)

Pollutant(s): Pathogens, Nutrients

Suspected Sources: Urban Runoff/Storm Sewers, Agriculture (Grazing-related Sources)

See TMDLs Under Development

<u>East Hickman Creek of Hickman Creek</u> Fayette County

From River Mile 12.6 to 14.0 Segment Length: 1.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers

See TMDLs Under Development.

Elkhorn Creek of Kentucky River Franklin County

From River Mile 0.0 to 17.8 Segment Length: 17.8

Impaired Use(s): Swimming (Nonsupport), Fish Consumption (partial)

Pollutant(s): Pathogens, Mercury

Suspected Sources: Agriculture (Grazing-related Sources), Unknown

See TMDLs Under Development.

Grapevine Creek of North Fork Kentucky River Perry County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration, Total Dissolved

Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Hanging Fork of Dix River Lincoln County

From Rile Mile 0.0 to 15.0 Segment Length: 15.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources), Land Disposal (Onsite Wastewater

Systems – Septic Tanks and/or Straight Pipes)

<u>Hardwick Creek of Red River</u> Powell County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources), Land Disposal (Onsite Wastewater

Systems – Septic Tanks and/or Straight Pipes)

Hawes Fork of Quicksand Creek Breathitt County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration (Other than Flow),

Total Dissolved Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Total Dissolved Solids has been added as a pollutant of concern based on specific conductivity data.

Hunting Creek of Quicksand Creek

Breathitt County

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Judy Creek of Red River Powell County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Review of ADB on September 8, 2003 identifies impaired RM segment to be 0.0 to 1.5. This updates the

2002 303(d) List which identified impaired RM segment as RM 0.0 to 1.4

<u>Kentucky River of Ohio River</u>

Madison/Fayette/Jessamine/Clark

From River Mile 150.2 to 190.8 Counties

Impaired Use(s): Swimming (Nonsupport) Segment Length: 40.6

Pollutant(s): Pathogens Suspected Sources: Unknown

Left Fork Millstone Creek of Millstone Creek Letcher County

From River Mile 1.5 to 2.7 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Siltation, Low pH
Suspected Sources: Resource Extraction

Swimming was not shown as an impaired use in the 2002 303(d) Report but should be included because low pH is a pollutant of concern.

<u>Long Fork of Buckhorn Creek</u> Breathitt County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s):Aquatic Life (Nonsupport)Pollutant(s):Total Dissolved SolidsSuspected Sources:Resource Extraction

<u>Lost Creek of Troublesome Creek</u>

Breathitt County

From River Mile 3.8 to 10.2 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration, Total Dissolved

Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

<u>Lotts Creek of North Fork Kentucky River</u> Perry County

From River Mile 1.2 to 6.0 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alteration (Other than Flow), Turbidity,

Total Dissolved Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface Mining, Subsurface Mining, Abandoned Mining, and Inactive Mining), Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization

Total dissolved solids has been added as a pollutant of concern based on specific conductivity data.

Lower Howard Creek of Kentucky River Clark County

From River Mile 2.7 to 6.2 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Unknown, Agriculture (Grazing-related Sources), Hydromodification

(Upstream Impoundment)

See TMDLs Under Development.

<u>Muddy Creek of Kentucky River</u>

Madison County

From River Mile 0.0 to 20.2 Segment Length: 20.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources)

North Elkhorn Creek of Elkhorn Creek Fayette County

From River Mile 65.0 to 73.7 Segment Length: 8.7

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources)

North Fork Kentucky River and Tributaries Letcher/Perry/Breathitt/Wolfe/Lee

From River Mile (main stem) 0.0 to 162.6 Counties

Impaired Use(s): Swimming (Nonsupport) Segment Length: 162.6

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Municipal Point Sources

See Approved TMDLs – North Fork Kentucky River and Tributaries.

North Fork Kentucky River of Kentucky River

Letcher County

From River Mile 142.6 to 147.7 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Urban Runoff/Storm Sewers (Erosion and Sedimentation), Habitat

Modification (Other than Hydromodification), Agriculture (Crop-related

Sources - Nonirrigated Crop Production)

North Fork Kentucky River of Kentucky River

Letcher County

From River Mile 147.7 to 158.0 Segment Length: 10.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Urban Runoff/Storm Sewers, Construction, Silviculture (Harvesting,

Restoration, and Residue Management), Agriculture (Crop-related Sources - Nonirrigated Crop Production), Agriculture (Grazing-related Sources -

Pasture Grazing – Riparian and/or Upland)

Potter Fork of Boone Fork Letcher County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes)

See TMDLs Under Development.

Quicksand Creek of North Fork Kentucky River Breathitt County

From River Mile 20.8 to 29.4 Segment Length: 8.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration, Total Dissolved

Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Rattlesnake Creek of Eagle Creek Grant County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

This listing appeared in the 2000 305(b) Report. A reevaluation of the assessment was made, and it was deemed inappropriate to use fish to assess this habitat type (slick bedrock). However, the stream will remain on the 303(d) list until an assessment is made of data collected in 2003.

Red Bird River of South Fork Kentucky River Clay County

From River Mile 0.0 to 15.0 Segment Length: 15.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes)

Rockhouse Creek of North Fork Kentucky River

Letcher County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Turbidity, Flow Alterations, Habitat Alteration, Total

Dissolved Solids

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Silviculture (Harvesting, Restoration, and Residue Management), Resource Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Silver Creek of Kentucky River Madison County

From River Mile 0.0 to 10.9 Segment Length: 10.9

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

South Elkhorn Creek of Elkhorn Creek Woodford County

From River Mile 34.0 to 35.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Habitat Modification (Other than Hydromodification), Hydromodification

This reach of South Elkhorn Creek is upstream of the confluence with Town Branch. The assessment information indicates that there has been Riparian Vegetation removal along the stream bank in this area.

<u>Spring Fork of Quicksand Creek</u>
Breathitt County

From River Mile 3.1. to 6.9 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration, Total Dissolved

Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization.

Stump Cave Branch of South Fork Red River Powell County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Resource Extraction (Petroleum Activities)

This stream was not listed in the 1998 303(d) report, but was included in the approved TMDL that included South Fork Red River and Sand Lick Fork. An assessment was not made for Stump Cave Branch in 1998, but the 1998 assessment information for South Fork Red River and Sand Lick Fork shows that these two stream segments fully support the aquatic life use. Stump Cave was not sampled in 2003. Assessment is scheduled for this year. South Fork Red River (the receiving stream) had exceptional water quality in 1998, and KDOW anticipates that the Salinity/TDS/Chlorides issue has been abated. See Kentucky River Unit – Approved TMDLs.

<u>Sulphur Creek of Drennon Creek</u> Henry County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification)

Tate Creek of Kentucky River Madison County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources), Agriculture

(Crop-related Sources), Agriculture (Grazing-related Sources)

See TMDLs Under Development.

<u>Town Branch of South Elkhorn Creek</u> Fayette County

From River Mile 0.0 to 10.3 Segment Length: 10.3

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Nutrients, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Grazing-related Sources) – RM 0.0 to 8.8, Municipal Point

Sources - RM 0.0 to 10.3, Urban Runoff/Storm Sewers - RM 0.0 to 11.3

The TMDL is currently being developed for nutrients for Town Branch and for a portion of South Elkhorn Creek immediately below Town Branch. That TMDL has been submitted to EPA Region 4 for informal approval. See TMDLs Under Development – Town Branch/South Elkhorn Creek Nutrient TMDL. A Federal Fiscal Year 2001 319 Assessment Grant to develop the pathogens TMDL was approved and data collection has been completed. The grant was awarded to the Kentucky Water Resources Research Institute. See TMDLs Under Development – Town Branch/Wolf Run/ South Elkhorn Creek/Cane Run Pathogens TMDL. A TMDL for pathogens for South Elkhorn Creek (including Town Branch and Wolf Run) is currently under development. Detailed data for use in the development of the TMDL were collected during the summers of 2002 and 2003, and a comprehensive HSPF model has been developed for each of the watersheds. It is anticipated that the TMDL for these streams will be completed by June 2004.

<u>Town Branch of South Elkhorn Creek</u> Fayette County

From River Mile 10.3 to 11.3 Segment Length: 1.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Nutrients, Organic Enrichment/Low DO, Flow Alterations Suspected Sources: Agriculture (Grazing-related Sources) – RM 0.0 to 8.8, Municipal Point

Sources - RM 0.0 to 10.3, Urban Runoff/Storm Sewers - RM 0.0 to 11.3

See Town Branch 0.0 to 10.3 and TMDLs Under Development.

<u>Troublesome Creek of North Fork Kentucky River</u>
From River Mile 0.0 to 25.2

Breathitt/Perry/Knott Counties
Segment Length: 25.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Municipal Point Sources

See Approved TMDLs - North Fork Kentucky River and Tributaries.

<u>Troublesome Creek of North Fork Kentucky River</u>
From River Mile 25.2 to 31.4

Breathitt/Perry/Knott Counties
Segment Length: 6.2

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Turbidity, Flow Alterations, Habitat Alteration, Total

Dissolved Solids

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Municipal Point Sources, Silviculture (Harvesting, Restoration, and

Residue Management), Resource Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian Vegetation and Bank

Modification/Destabilization

See Approved TMDLs - North Fork Kentucky River and Tributaries. Total dissolved solids has been added as a pollutant of concern based on specific conductivity data.

<u>Troublesome Creek of North Fork Kentucky River</u>
From River Mile 31.4 to 49.5

Breathitt/Perry/Knott Counties
Segment Length: 18.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Municipal Point Sources

The approved TMDL, "Removing Fecal Pollution from the North Fork Kentucky River Basin" includes this stream segment. See Approved TMDLs – North Fork Kentucky River and Tributaries Pathogens TMDL.

UT of Baughman Fork at River Mile 2.6 Fayette County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources

The listing was incorrectly shown in the 1998 303(d) Report as Baughman Fork. The TMDL for nutrients and organic enrichment/low DO is approved and enforcement action has been taken against the Blue Sky WWTP. The case is currently under litigation.

<u>UT of Cane Run at River Mile 6.05</u>

From River Mile 0.0 to 3.5

Scott/Fayette Counties
Segment Length: 3.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Agriculture

(Grazing-related Sources)

UT of N Br of Lulbegrud Cr at River Mile 2.6 Montgomery County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

UT of Swift Camp Cr at River Mile 11.7 Wolfe County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Urban Runoff/Storm Sewers (Erosion and Sedimentation), Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight Pipes)

See TMDLs Under Development.

Wolf Run of Town BranchFayette CountyFrom River Mile 0.0 to 4.1Segment Length: 4.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Nutrients, Habitat Alterations (Other than Flow)
Suspected Sources: Urban Runoff/Storm Sewers, Hydromodification (Channelization)

The listing for pathogens is from the 1998 303(d) Report. A 319 Assessment Grant to develop the pathogens TMDL was approved and data collection has been completed. The grant was awarded to the Kentucky Water Resources Research Institute. See Kentucky River Unit – TMDLs Under Development – Town Branch/Wolf Run/ South Elkhorn Creek/Cane Run Pathogens TMDL. A TMDL for pathogens for South Elkhorn Creek (including Town Branch and Wolf Run) is currently under development. Detailed data for use in the development of the TMDL were collected during the summers of 2002 and 2003, and a comprehensive HSPF model has been developed for each of the watersheds. It is anticipated that the TMDL for these streams will be completed by June 2004.

Section 2.5.1.2 2nd Priority Listings

Arnolds Creek of Ten Mile Creek Grant County

From River Mile 0.0 to 10.8 Segment Length: 10.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources, Nonirrigated Crop Production), Habitat

Modification (Other than Hydromodification) - Bank Modification/

Destabilization

Banta's Fork of Salt River of Six Mile Creek

Henry County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification)

Baughman Fork of Boone Creek Fayette County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing – Riparian and/or

Upland), Municipal Point Sources (Package Plants - Small Flows)

See TMDLs Under Development.

Benson Creek of the Kentucky River Franklin County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Habitat Alteration

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification)

See TMDLs Under Development.

Benson Creek of Kentucky River Franklin County

From River Mile 4.6 to 6.7 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff),

Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes) Habitat Modification (Other than Hydromodification)

See TMDLs Under Development.

Big Caney Creek of Quicksand Creek

Breathitt County

From River Mile 0.3 to 8.0 Segment Length: 7.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Total Dissolved Solids, Siltation, Turbidity, Flow Alterations, Habitat

Alterations (Other then Flow)

Suspected Sources: Silviculture (Harvesting, Restoration, Residue Management), Resource

Extraction (Surface Mining and Abandoned Mining), Habitat Modifications (Removal of Riparian Vegetation and Bank Modification/Destabilization)

Siltation, Turbidity, Flow Alterations, and Habitat Alterations (Other then Flow) have been added as pollutants of concern based on a re-evaluation of the assessment information.

Big Twin Creek of Kentucky River

Owen County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification)

Boone Creek of Kentucky River Fayette/Clark Counties
From River Mile 0.0 to 7.4 Segment Length: 7.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Agriculture (Grazing-related Sources), Municipal Point Sources (Package

Plants - Small Flows)

See TMDLs Under Development.

Brush Creek of Red River Powell County

From River Mile 0.0 to 6.6 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Bull Creek of Collins Fork Knox County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-Related Sources - Nonirrigated Crop Production)

Carr Fork of North Fork Kentucky River Perry County

From River Mile 15.8 to 26.4 Segment Length: 10.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Resource Extraction

<u>Cedar Creek of Kentucky River</u> Owen County

From River Mile 2.2 to 6.7 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alteration (Other than Flow), Organic Enrichment/Low DO Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification) –

Removal of Riparian Vegetation and Bank Modification/Destabilization,

Construction (Highway/Road/Bridge Construction)

<u>Clarks Run of Dix River</u>

Boyle County

From River Mile 0.0 to 4.3 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Urban Runoff/Storm Sewers, Municipal Point Sources (Major Municipal

Point Sources)

<u>Collins Fork of Goose Creek</u> Clay County

From River Mile 2.4 to 6.3 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Habitat Modification (Other than Hydromodification)

Cope Fork of Frozen Creek Breathitt County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alteration (Other than Flow), Total Dissolved Solids

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing – Riparian and/or Upland), Silviculture, Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization, Hydromodification (Channelization), Resource Extraction (Surface Mining)

Copper Creek of Dix RiverLincoln/Rockcastle CountiesFrom River Mile 0.0 to 1.5Segment Length: 1.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Grazing-related Sources)

See Approved Delistings.

Dry Run of North Elkhorn Creek Scott County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Nutrients, Unknown

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing – Riparian and/or

Upland)

<u>Eagle Creek of Kentucky River</u>

Grant County

From River Mile 29.9 to 34.5 Segment Length: 5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Agriculture (Grazing-related Sources), Agriculture (Crop-related Sources)

<u>Eagle Creek of Kentucky River</u>
From River Mile 48.6 to 55.9
Owen/Grant Counties
Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Agriculture (Grazing-related Sources), Agriculture (Crop-related Sources)

East Fork Otter Creek of Kentucky River

Madison County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Excessive Algal Growth/Chlorophyll a

Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources –

Pasture Grazing – Riparian and/or Upland)

Elk Creek of Eagle Creek Owen County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification) –

Removal of Riparian Vegetation

Flat Creek of Kentucky River Franklin County

From River Mile 0.0 to 7.1 Segment Length: 7.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification)

Goose Creek of Benson Creek Shelby County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alteration (Other than Flow), Unknown

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification), Urban

Runoff/Storm Sewers (Highway/Road/Bridge Runoff)

See TMDLs Under Development.

Goose Creek of Benson Creek Shelby County

From River Mile 1.9 to 4.2 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing – Riparian and/or

Upland)

See TMDLs Under Development.

Goose Creek of South Fork Kentucky River Clay County

From River Mile 0.0 to 9.3 Segment Length: 9.3

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes)

Grassy Run of Eagle Creek Grant County

From River Mile 0.0 to 6.4 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Unknown

See Delisting Requests.

Griers Creek of Kentucky River Woodford County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other than Flow)
Suspected Sources: Agriculture, Urban Runoff/Storm Sewers, Habitat Modification (Other than

Hydromodification)

A reevaluation of the assessment was made and it was deemed more appropriate that the upper end of the impaired segment should be at river mile 2.5 instead of the previous listing of 3.4.

<u>Hammons Fork of Collins Fork</u> Knox County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other than Flow)

Suspected Sources: Collection System Failure, Habitat Modification (Other than

Hydromodification) – Bank Modification/Destabilization and Highway

Maintenance and Runoff

<u>Hatton Creek of Red River</u> Powell County

From River Mile 0.0. to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Hell Creek of North Fork Kentucky River

Lee County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alteration (Other than Flow), Total Dissolved Solids

Suspected Sources: Silviculture (Silviculture Point Sources), Resource Extraction (Surface

Mining, Petroleum Activities, and Inactive Mining)

<u>Hickman Creek of Kentucky River</u>

Jessamine County

From River Mile 0.0 to 25.0 Stream Segment: 25.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Agriculture (Grazing-related Sources), Urban Runoff/Storm Sewers

See TMDLs Under Development

<u>Holly Creek of North Fork Kentucky River</u>

Wolfe County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources – Nonirrigated Crop Production), Land

Disposal (Inappropriate Waste Disposal/Wildcat Dumping), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

This listing appeared in the 2000 305(b) Report. A reevaluation of the assessment was made based on new metrics and the reevaluation indicates that the assessment should be deemed inconclusive. However, this stream will be included on the 2004 303(d) list until additional data collected in 2003 are analyzed.

<u>Horse Creek of Goose Creek</u> Clay County

From River Mile 0.0 to 6.8 Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization, Agriculture (Crop-related

Sources - Nonirrigated Crop Production)

Kentucky River of Ohio RiverCarroll/Henry/Owen CountiesFrom River Mile 10.8 to 51.8Segment Length: 41.0

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Unknown

Kentucky River of Ohio River Franklin/Mercer/Jessamine/Woodford/

From River Mile 65.4 to 118.2 Anderson Counties

Impaired Use(s): Fish Consumption(Partial Support) Segment Length: 52.8

Pollutant(s): Mercury
Suspected Sources: Unknown

This is a new listing based on fish tissue data.

Kentucky River of Ohio River Madison/Fayette/Jessamine/Clark

From River Mile 118.2 to 139.0 Counties

Impaired Use(s): Swimming (Partial Support) Segment Length: 20.8

Pollutant(s): Pathogens Suspected Sources: Agriculture

See 2nd Priority Delisting Request.

<u>Kentucky River of Ohio River</u>
From River Mile 190.8 to 201.0

Madison/Estill/Clark Counties
Segment Length: 10.2

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Agriculture

See 2nd Priority Delisting Requests.

<u>Lacy Creek of Red River</u>
Wolfe County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>Laurel Creek of Goose Creek</u> Clay County

From River Mile 3.8 to 4.8 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Nutrients, Thermal Modifications

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing – Riparian and/or

Upland).

<u>Left Fork Island Creek of Island Creek</u>
Owsley County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Exotic Species

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production)

Exotic species is considered pollution and not a pollutant. Therefore, a TMDL is not required for exotic species. This listing is for siltation

<u>Lick Creek of Eagle Creek</u> Carroll County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources – Pasture Grazing, Upland), Land

Disposal (Inappropriate Waste Disposal/Wildcat Dumping),

Hydromodification (Dredging)

See 2nd Priority Delisting Requests.

Line Fork of Defeated Creek Letcher County

From River Mile 11.6 to 27.5 Segment Length: 15.9

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes)

Lower Buffalo Creek of South Fork Kentucky River

Owsley County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

<u>Lulbegrud Creek of Red River</u>
From River Mile 0.0 to 7.3

Clark/Powell Counties
Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation
Suspected Sources: Unknown

<u>Lytles Fork of Eagle Creek</u> Scott County

From River Mile 0.0 to 14.3 Segment Length: 14.3

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland), Habitat Modification (Other than Hydromodification) - Removal of

Riparian Vegetation, Natural Sources (Flooding)

McConnell Run of North Fork Elkhorn Creek Scott County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland)

See TMDLs Under Development.

Meadow Creek of South Fork Kentucky River

Owsley County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Grazing-related Sources – Pasture Grazing - Riparian and/or

Upland)

This listing appeared in the 2000 305(b) Report. Because metrics were revised, reevaluation of the assessment will be made on 2003 data. The stream is included on the 2004 303(d) list until the stream is re-assessed.

North Benson Creek of Benson Creek Franklin County

From River Mile 0.8 to 2.0 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Construction, Urban Runoff/Storm Sewers

(Highway/Road/Bridge Runoff)

See TMDLs Under Development

North Fork North Benson Creek Franklin County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other than Flow)
Suspected Sources: Agriculture, Construction (Land Development, Habitat Modification (Other

than Hydromodification) - Removal of Riparian Vegetation

See TMDLs Under Development.

Otter Creek of Kentucky River Madison County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources), Agriculture

(Crop-related Sources), Agriculture (Grazing-related Sources - Pasture

Grazing – Riparian and/or Upland)

Paint Lick Creek of Kentucky RiverGarrard/Madison CountiesFrom River Mile 0.0 to 7.5Segment Length: 7.5

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources)

<u>Plum Creek of Red River</u> Powell County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Polls Creek of Cutshin Creek

Leslie County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Puncheon Camp Creek of Middle Fork Kentucky River

Breathitt County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Quicksand Creek of North Fork Kentucky River

Breathitt County

From River Mile 0.55 to 12.7 Segment Length: 12.15

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Added because of re-assessment of biological metrics of 1998 data.

Richland Creek of Eagle Creek Owen County

From River Mile 0.0 to 0.8 Segment Length: 0.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources – Specialty Crop Production - Tobacco),

Natural Sources (Intense Rainfall-Flooding)

<u>Sawdridge Creek of Cedar Creek</u> Owen County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification)

Sexton Creek of Goose Creek Clay County

From River Mile 9.1 to 16.1 Segment Length: 7.0 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Siltation, Low pH

Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources),

Industrial Point Sources

Silver Creek of Kentucky River Madison County

From River Mile 10.9 to 29.2 Segment Length: 18.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources – Nonirrigated Crop Production,

Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland), Silviculture, Municipal Point Sources

This listing appeared in the 2000 305(b) Report. Because metrics were revised, reevaluation of the assessment will be made based on data collected in 2003. The stream is included on the 2004 303(d) list until the 2003 data are assessed.

South Elkhorn Creek of Elkhorn Creek
From River Mile 16.4 to 34.0

Scott/Woodford Counties
Segment Length: 17.6

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Nutrients, Pathogens

Suspected Sources: Agriculture, Urban Runoff/Storm Sewers, Municipal Point Sources

See TMDLs Under Development.

South Elkhorn Creek of Elkhorn Creek Fayette County

From River Mile 39.9 to 48.0 Segment Length: 8.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

South Fork Quicksand Creek of Quicksand Creek Breathitt County

From River Mile 0.0 to 8.0 Segment Length: 8.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Total Dissolved Solids

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing – Riparian and/or Upland), Habitat Modification (Other than Hydromodification); Resource

Extraction (Surface Mining)

Station Camp Creek of Kentucky River Estill County

From River Mile 0.0 to 7.2 Segment Length: 7.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation
Suspected Sources: Agriculture

Stevens Creek of Eagle Creek Owen County

From River Mile 14.4 to 17.1 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing – Riparian and/or

Upland)

Swift Camp Creek of Red River Wolfe County

From River Mile 0.0 to 13.6 Segment Length: 13.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

See TMDLs Under Development

Ten Mile Creek of Eagle Creek Grant County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Three Forks Creek of Eagle Creek Grant/Owen Counties

From River Mile 0.0 to 7.6 Segment Length: 7.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation
Suspected Sources: Unknown

Upper Devil Creek of North Fork Kentucky River Wolfe County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Sources: Silviculture, Resource Extraction (Abandoned Mining), Land Disposal

(Inappropriate Waste Disposal/Wildcat Dumping)

<u>Upper Howard Creek of Kentucky River</u>

Clark County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown <u>Upper Twin Creek of Middle Fork Kentucky River</u>

Breathitt County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

West Fork Mill Creek of Mill Creek Carroll County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff and Other

Urban Runoff), Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization

West Hickman Creek of Hickman Creek

Jessamine County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Nutrients, Pathogens

Suspected Sources: Urban Runoff/Storm Sewers, Municipal Point Sources (Major Municipal

Point Sources)

See TMDLs Under Development Section

West Hickman Creek of Hickman CreekJessamine/Fayette CountiesFrom River Mile 3.0 to 8.6Segment Length:5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alteration (Other than Flow)

Suspected Sources: Urban Runoff/Storm Sewers

See TMDLs Under Development

White Lick Creek of Paint Lick Creek Garrard County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Suspended Solids

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Crop-related Sources - Specialty Crop Production – Tobacco)

Wooten Creek of Cutshin Creek Leslie County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Section 2.5.1.3 Impaired Waters Not Requiring TMDLs

Stream Segments Assessed As Impaired Based Solely On Discharge Monitoring Reports (DMRs).

<u>Harts Fork of Hayes Fork</u> Madison County

From River Mile 3.2 to 4.2 Segment Length: 1.0

DMR information from several Industrial Point Sources indicates aquatic life use impairment because of ammonia, pH, organic enrichment/Low DO, and suspended solids.

Hays Fork of Silver Creek Madison County

From River Mile 1.2 to 4.7 Segment Length: 3.5

DMR information from a Municipal Point Sources indicates aquatic life use impairment because of ammonia, chlorine, nutrients, and suspended solids.

<u>Lanes Run of North Elkhorn Creek</u> Scott County

From River Mile 0.0 to 0.5 Segment Length: 0.5

DMR information from a Municipal Point Source indicates swimming use impairment because of pathogens.

Lee Branch of South Elkhorn Creek Woodford County

From River Mile 0.0 to 1.0 Segment Length: 1.0

DMR information from a Municipal Point Source indicates swimming use impairment because of pathogens.

Shallow Ford Creek of Tate Creek Madison County

From River Mile 5.9 to 6.9 Segment Length: 1.0

DMR information from a Municipal Point Source indicates aquatic life use impairment because of ammonia and chlorine.

Streammill Branch of Clarks Creek Grant County

From River Mile 0.6 to 1.6 Segment Length: 1.0

DMR information from a Municipal Point Source indicates aquatic life use impairment because of ammonia.

Town Creek of Drennon Creek Henry County

From River Mile 2.5 to 3.5 Segment Length: 1.0

DMR information from a Municipal Point Source indicates aquatic life use impairment because of ammonia and chlorine.

<u>UT of Dry Run (River Mile 3.1)</u> Scott County

From River Mile 1.5 to 2.5 Segment Length: 1.0

DMR information from a package plant indicates swimming use impairment because of pathogens.

<u>UT of East Fork Clear Creek (River Mile 3.6)</u>
Jessamine County

From River Mile 2.8 to 3.8 Segment Length: 1.0

DMR information from a package plant indicates swimming use impairment because of pathogens.

Other Impaired Waters Not Requiring TMDLs

Two Mile Creek of Eagle Creek Owen County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Flow Alterations Suspected Sources: Natural Sources

This listing appeared in the 2000 305(b) Report. This impairment was caused by flooding from heavy spring rains. Because this impairment is the result of a naturally occurring event (flooding), a TMDL is not appropriate.

Left Fork Island Creek of Island Creek Owsley County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Exotic Species

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production)

Exotic species is considered pollution and not a pollutant. Therefore, a TMDL is not required for exotic species.

Moseby Branch of Eagle Creek Owen County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Sources: Natural Sources, Habitat Modification (Other than Hydromodification) -

Bank Modification/Destabilization

This listing appeared in the 2000 305(b) Report. This impairment was caused by flooding from heavy spring rains. Because this impairment is the result of a naturally occurring event (flooding), a TMDL is not appropriate.

Section 2.5.2 Salt/Licking River Basin Unit

Section 2.5.2.1 1st Priority Listings

Licking River Basin

Allison Creek of Fleming Creek
Fleming County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Nutrients (Phosphorus), Organic enrichment/Low DO, Pathogens, Noxious

Aquatic Plants

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

This listing is from the 1998 303(d) Report. The TMDL for pathogens is approved. See Salt/Licking River Unit – Approved TMDLs – Fleming Creek Watershed. See Salt/Licking River Unit – TMDLs Under Development – Fleming Creek Watershed for nutrients and/or organic enrichment/low DO.

Banklick Creek of Licking River Kenton County

From River Mile 0.0 to 8.2 Segment Length: 8.2

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Nutrients, Siltation, Habitat Alteration, Organic Enrichment/Low DO,

Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Construction,

Combined Sewer Overflows

Some data collection has been done by KDOW personnel. A comprehensive water-quality study has been initiated by Sanitation District #1. Runoff event samples were scheduled to be collected starting fall 2002. Upgrades to the Lakeview Pump Station (river mile 3.8) have been made by SD#1. Limno Tech has completed sampling for hydrologic and water quality modeling in September 2003 with the report to be finalized in 2004.

Banklick Creek of Licking River Kenton County

From River Mile 8.2 to 19.0 Segment Length: 10.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Nutrients, Habitat Alteration, Organic Enrichment/Low DO, Pathogens Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Construction,

Agriculture

Some data collection has been done by KDOW personnel. A comprehensive water-quality study has also been initiated by Sanitation District #1. Runoff event samples are scheduled to be collected starting fall 2002. Approximately 75 homes with failing septic systems have been incorporated into the SD#1 network, and approximately 20 manhole covers have been installed with watertight lids. Limno Tech completed sampling for hydrologic and water quality modeling in September 2003 with the report to be finalized in 2004.

Burning Fork of Licking River Magoffin County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes)

<u>Cassidy Creek of Fleming Creek</u> Fleming County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

This listing was not in the 1998 303(d) Report. However, upon a review of the pathogens data for the Fleming Creek watershed, this stream segment was included as part of the Fleming Creek Watershed pathogens TMDL. See Approved TMDLs – Fleming Creek Watershed, for pathogens.

<u>Cooper Run of Stoner Creek</u>

Bourbon County

From River Mile 0.0 to 10.1 Segment Length: 10.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Nutrients
Suspected Sources: Agriculture (Grazing-related Sources)

<u>Craintown Branch of Fleming Creek</u> Fleming County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)
Pollutant(s): Nutrients (Phosphorus), Pathogens, Noxious Aquatic Plants

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

See Approved TMDLs – Fleming Creek Watershed, for pathogens. See TMDLs Under Development – Fleming Creek Watershed, for nutrients.

Crooked Creek of Licking River Nicholas County

From River Mile 0.0 to 9.1 Segment Length: 9.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Unknown

<u>Doty Creek of Fleming Creek</u> Fleming County

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Pathogens

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or

Upland), Agriculture (Intensive Animal Feeding Operations and Grazing-

related Sources)

The listing for organic enrichment/low DO is based on evaluated data. See Approved TMDLs for pathogens and TMDLs under development for organic enrichment/low DO. The TMDL has gone through preliminary review by EPA and is being prepared for public notice.

Elk Fork of Licking River Morgan County

From River Mile 4.9 to 10.5 Segment Length: 5.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration (Other than Flow)
Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Flat Creek of Licking River Bath County

From River Mile 0.0 to 0.9 Segment Length: 0.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Flat Run of Stoner Creek Bourbon County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Nutrients

Suspected Sources: Agriculture (Grazing-related Sources)

Fleming Creek of Licking River Fleming/Nicholas Counties
From River Mile 0.0 to 39.2 Fleming/Nicholas Counties
Segment Length: 39.2

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Nutrients (Phosphorus), Organic Enrichment/Low DO
Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

This listing is from the 1998 303(d) Report. See Approved TMDLs – Fleming Creek Watershed, for pathogens. The TMDL for nutrients and organic enrichment/low DO is currently under development using EPA Region 4 FFY2000 104(b)3 set-aside funds. See TMDLs Under Development -Fleming Creek Watershed.

Fox Creek of Licking River Fleming County

From River Mile 20.1 to 22.7 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management),

Hydromodification (Dredging)

Hinkston Creek of South Fork Licking River Nicholas/Bourbon/Bath/Montgomery

From River Mile 41.8 to 49.1 Counties

Impaired Use(s): Swimming (Nonsupport), Aquatic Segment Length: 7.3

Life (Partial Support)

Pollutant(s): Siltation, Pathogens

Suspected Sources: Agriculture

<u>Hinkston Creek of South Fork Licking River</u>
From River Mile 51.5 to 65.9

Bath/Montgomery Counties
Segment Length: 14.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Nutrients

Suspected Sources: Agriculture (Grazing-related Sources)

Houston Creek of Stoner Creek Bourbon County

From River Mile 0.0 to 9.0 Segment Length: 9.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

<u>Johnson Creek of Licking River</u>

Magoffin County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Johnson Creek of Licking River Robertson County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

<u>Licking River of Ohio River</u>
From River Mile 0.0 to 4.6

Campbell/Kenton Counties
Segment Length: 4.6

Impaired Use(s): Swimming (Partial Support), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Organic Enrichment/Low DO

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers

This stream segment was listed in the 1998 303(d) Report for nonsupport of the swimming use. Data collected in 1999 resulted in this assessment being changed from nonsupport to partial support for the swimming use and to partial support of the aquatic life use, however; this segment will remain as first priority for the 2004 303(d) List.

<u>Licking River of Ohio River</u> Magoffin County

From River Mile 293.3 to 301.1 Segment Length: 7.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

The suspected source, collection system failure, that was shown in the 2002 303(d) was incorrect. Data will be collected in 2004 to confirm the listing.

<u>Little Stoner Creek of Stoner Creek</u> Clark County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Logan Run of Fleming Creek Fleming County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

This aquatic life listing is from the 1998 303(d) Report. The listing for pathogens was not in the 1998 303(d) Report. However, upon a review of the pathogens data for the Fleming Creek watershed, this stream segment was included as part of the Fleming Creek Watershed Pathogens TMDL. See Approved TMDLs for Pathogens. See TMDLs Under Development for Organic Enrichment/Low DO.

Middle Fork Licking River of Licking River

Magoffin County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture, Land Disposal (Onsite Wastewater Systems – Septic Tanks

and/or Straight Pipes)

North Fork Licking River of Licking River
From River Mile 18.1 to 51.7

Bracken/Mason Counties
Segment Length: 33.6

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Siltation, Pathogens

Suspected Sources: Agriculture

<u>Phillips Creek of Licking River</u>

Campbell County

From River Mile 0.0 to 5.3 Segment Length: 5.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown <u>Poplar Creek of Fleming Creek</u> Fleming County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

This listing was not in the 1998 303(d) Report. However, upon a review of the pathogens data for the Fleming Creek watershed, this stream segment was included as part of the Fleming Creek Watershed pathogens TMDL. See Approved TMDLs – Fleming Creek Watershed.

<u>Prickly Ash of Slate Creek</u>

Bath County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients Suspected Sources: Agriculture

<u>Puncheon Camp Creek of Licking River</u>

Magoffin County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Scrubgrass Creek of Cassidy Creek Nicholas County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Slate Creek of Licking River

Bath County

From River Mile 0.0 to 7.0 Segment Length: 7.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Sleepy Run of Fleming Creek Fleming County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

See Approved TMDLs – Fleming Creek Watershed.

Stoner Creek of South Fork Licking River

Bourbon County

From River Mile 5.5 to 15.0 Segment Length: 9.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown Stony Creek of Licking River Nicholas County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Unknown Pollutant(s): Suspected Sources: Unknown

Straight Creek of Elk Fork Morgan County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration (Other than Flow) Silviculture (Harvesting, Restoration, and Residue Management), Resource Suspected Sources:

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Strodes Creek of Stoner Creek **Bourbon County**

From River Mile 2.7 to 19.3 Segment Length: 16.6

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport) Pollutant(s): Nutrients, Organic Enrichment/Low DO, Siltation, Pathogens

Suspected Sources: Municipal Point Sources, Agriculture, Construction, Urban Runoff/Storm

Sewers, Habitat Modification (Other than Hydromodification)

Threemile Creek of Licking River Campbell County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport) Pollutant(s): Nutrients, Organic Enrichment/Low DO, Pathogens

Suspected Sources: Unknown, Collection System Failure

This listing is from the 1998 303(d) Report. The stream continues to be under a swimming advisory. Several improvements have been made by SD#1 in selected areas in the watershed, including the unnamed tributary at river mile 0.5 of Threemile Creek. Twenty-five homes that had failing septic systems were put on SD#1's sanitary system. The most recent fecal coliform data shows improving instream values.

Fleming County Town Branch of Fleming Creek

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operation and Grazing-related

Sources), Municipal Point Sources

See Approved TMDLs - Fleming Creek Watershed.

Townsend Creek of South Fork Licking River Harrison/Bourbon Counties Segment Length: 4.8

From River Mile 0.0 to 4.8

Impaired Use(s): Swimming (Nonsupport)

Pathogens Pollutant(s): Suspected Sources: Unknown

<u>Triplett Creek of Licking River</u>

Rowan County

From River Mile 5.8 to 12.0 Segment Length: 6.2

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Nutrients, Organic Enrichment/Low DO, Siltation

Suspected Sources: Municipal Point Sources, Agriculture, Construction, Urban Runoff/Storm

Sewers, Hydromodification, Habitat Modifications

The updated assessment information defines pollutants for the aquatic life use impairment and suspected sources for all pollutants.

UT of Fleming Creek at River Mile 4.28 Fleming County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

This listing was not in the 1998 303(d) Report. However, upon a review of the pathogens data for the Fleming Creek watershed, this stream segment was included as part of the Fleming Creek Watershed pathogens TMDL. See Approved TMDLs-Fleming Creek Watershed.

Williams Creek of Elk Fork Morgan County

From River Mile 0.0 to 5.3 Segment Length: 5.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Wilson Run of Fleming Creek Fleming County

From River Mile 0.0 to 5.1 Segment Length: 5.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources)

See approved TMDLs.

Ohio River Basin

Beargrass Creek of Ohio River Jefferson County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Metals, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Combined Sewer Overflows, Urban Runoff/Storm

Sewers

The most recent information shows that Middle Fork is no longer impaired by metals (but the data are limited), and that South Fork Beargrass Creek (which is also upstream of the Beargrass Creek segment) is impaired by metals (cadmium). As a result, the listing for metals for Beargrass Creek (river mile 0.0 to 1.5) is carried forward. The previous metals violations on Middle Fork and the current metals violation on South Fork are for cadmium, based on the Louisville and Jefferson County Metropolitan Sewer District (MSD) water-quality data and information. However, the MSD report containing the metals data states that the cadmium values that MSD reports should be used with caution. Currently KDOW is collecting metals data to provide adequate assessment. EPA awarded a 2003 104(b)3 grant for pathogens and organic enrichment/Low DO TMDL for the Beargrass Creek Watershed.

Brush Creek of Twelve Mile Creek Campbell County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Pathogens

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources)

The aquatic life nonsupport listing is from the 1998 303(d) Report. The swimming nonsupport listing is based on data collected during the summer of 1999. Both pollutants are the result of bypasses of sewage and discharge of sewage sludge to the stream from the Alexandria WWTP. Sanitation District #1 (SD#1) now operates the Alexandria WWTP, which discharges at RM 1.6. This stream segment was listed in the 1998 303(d) Report because of operational problems at the WWTP (sewage sludge released to the stream) based on information from the KDOW Florence Regional Office. A study has been conducted by SD#1 to define problem areas within the collection system and treatment system. As a result, the Alexandria WWTP will be expanded to collect excess flow during wet weather events and will become the Eastern Regional WWTP in SD#1's network. The discharge will go to the Ohio River. The expansion is to be completed in 2005. Upon completion of the expansion, Brush Creek will no longer receive any discharge from the Alexandria WWTP. At that time, a request to delist Brush Creek for organic enrichment/low DO will be submitted to EPA Region 4. A stream assessment conducted in 1999 showed full support of the aquatic life use, and 24-hour DO data collected in the stream reach during low-flow conditions indicated no violations of the DO standard. However, the possibility of sludge in the stream until the discharge to the stream is removed warrants the continued listing of organic enrichment/low DO as a pollutant of concern. With respect to pathogens, follow-up monitoring would need to be conducted to determine if a swimming impairment exists.

<u>Cabin Creek of Ohio River</u>
From River Mile 3.6 to 11.3

Mason/Lewis Counties
Segment Length: 7.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alteration (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources – Nonirrigated Crop Production),

Agriculture (Intensive Animal Feeding Operations and Grazing-related

Sources), Habitat Modification (Other than Hydromodification)

<u>Doe Run of Ohio River</u> Meade County

From River Mile 4.1 to 7.9 Segment Length: 3.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Elijahs Creek of Ohio River Boone County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nonpriority Organics (De-icing Fluids)

Suspected Sources: Urban Runoff/Storm Sewers (Industrial Permitted)

See Approved TMDLs under Gunpowder Creek.

Fourmile Creek of Ohio River Campbell County

From River Mile 0.0 to 8.3 Segment Length: 8.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Collection System Failure, Sanitary Sewer

Overflows

The listing in the 1998 303(d) Report was only for the reach from 0.0 to 0.2. Based on additional fecal coliform sampling in 1999, the impaired reach has been extended to 8.3 (to just below the Reilly Road Pump Station). Sanitation District #1 plans to remove the Reilly Road Pump Station #1 in 2004. There have been problems with the pump station, which is located at River Mile 8.3. The Reilly Road Pump Station #2 (approximately river mile 7.5) will be upgraded. Near the mouth of Fourmile Creek the force main has been replaced at the Silver Grove Pump Station.

Goose Creek of Ohio River Jefferson County

From River Mile 3.2 to 11.7 Segment Length: 8.5

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Organic Enrichment/Low DO, Pathogens, Metals (Cadmium)

Suspected Sources: Industrial Point Sources, Municipal Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

The listing is based on Louisville and Jefferson County MSD data. For the water quality data from MSD, it is noted that the cadmium metals data should be used with caution. KDOW is collecting metals data to confirm previous exceedances.

Gunpowder Creek of Ohio River Boone County

From River Mile 0.0 to 15.0 Segment Length: 15.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Construction (Land Development)

Gunpowder Creek of Ohio River Boone County

From River Mile 15.7 to 18.9 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nonpriority Organics (De-icing Fluids)

Suspected Sources: Urban Runoff/Storm Sewers (Industrial Permitted)

See Approved TMDLs

Gunpowder Creek of Ohio River Boone County

From River Mile 15.0 to 16.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture, Construction (Land Development), Urban Runoff/Storm Sewers

(Other Urban Runoff – Nonpermitted), Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff), Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank

Modification/Destabilization

Hardins Creek of Sinking Creek Breckinridge County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Nutrients

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Riparian)

<u>Hardy Creek of Little Kentucky River</u>

Trimble County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow)

Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources),

Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff), Habitat Modification (Other than Hydromodification) – Removal of Riparian

Vegetation and Bank Modification/Destabilization)

Harrods Creek of the Ohio River

Jefferson/Oldham Counties

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows)

See Approved TMDLs.

<u>Hite Creek of Ohio River</u>

Jefferson County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Unknown Toxicity
Suspected Sources: Municipal Point Sources

This listing is from the 1998 303(d) Report. Even though the Hite Creek WWTP has complied with meeting toxicity levels, a stream assessment will need to be done to determine if the stream supports the aquatic life use. The 303(d) Listing was based on both the toxicity testing and an in-stream aquatic life use assessment. A stream assessment is planned for 2004 - 2005.

<u>Little Goose Creek of Goose Creek</u>

Jefferson County

From River Mile 0.0 to 8.7 Segment Length: 8.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers

<u>Locust Creek of Ohio River</u>

Bracken County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Locust Creek of Ohio River Bracken County

From River Mile 4.1 to 12.2 Segment Length: 8.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Middle Fork Beargrass Creek of Beargrass Creek

Jefferson County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Habitat Alteration (Other than Flow), Metals

(Cadmium), Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers,

Hydromodification (Channelization)

The most recent information shows that Middle Fork is no longer impaired by metals, but the data are limited. EPA awarded a 2003 104(b)3 grant for pathogens and organic enrichment/Low DO TMDL for the Beargrass Creek Watershed. KDOW is currently collecting additional metals data.

Middle Fork Beargrass Creek of Beargrass Creek

Jefferson County

From River Mile 2.3 to 15.2 Segment Length: 12.9

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Metals (Cadmium)

Suspected Sources: Urban Runoff/Storm Sewers, Land Disposal, Combined Sewer Overflows,

Sanitary Sewer Overflows

The aquatic life impairment is based on cadmium. MSD's report states that the cadmium data should be used with caution. Samples taken during the assessment period indicated no metals impairment, but the number of samples was limited. Therefore, the listing is carried forward from the 1998 303(d) Report. EPA awarded a 2003 104(b)3 grant for pathogens and organic enrichment/Low DO TMDL for the Beargrass Creek Watershed. KDOW is currently collecting additional metals data.

Mill Creek of Ohio River

Jefferson County

From River Mile 0.0 to 9.7 Segment Length: 9.7

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Siltation, Organic Enrichment/Low DO, Habitat Alterations

(Other than Flow)

Suspected Sources: Industrial Point Sources, Municipal Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

Mill Creek Cutoff of Ohio River Jefferson County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

Muddy Fork of Beargrass Creek

Jefferson County

From River Mile 0.0 to 6.9 Segment Length: 6.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Industrial Point Sources, Municipal Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

This stream segment was listed as 2nd Priority for pathogens in the 1998 303(d) Report. Subsequent data shows that the stream is in nonsupport of the swimming designated use. EPA awarded a 2003 104(b)3 grant for pathogens and organic enrichment/Low DO TMDL for the Beargrass Creek Watershed.

Sinking Creek of Ohio River Breckinridge County From River Mile 8.9 to 15.6 Segment Length:

From River Mile 8.9 to 15.6 Segment Length: 6.7 Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Agriculture, Habitat Modification (Other than

Hydromodification

Snag Creek of Ohio River Bracken County

From River Mile 0.5 to 5.5 Segment Length: 5.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Unknown

South Fork Beargrass Creek of Beargrass Creek

Jefferson County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)
Pollutant(s): Metals (Cadmium), Pathogens, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal,

Combined Sewer Overflows, Sanitary Sewer Overflows

The MSD data report states that the cadmium data should be used with caution. KDOW is currently collecting additional metals data. EPA awarded a 2003 104(b)3 grant for pathogens and organic enrichment/Low DO TMDL for the Beargrass Creek Watershed.

South Fork Beargrass Creek of Beargrass Creek

Jefferson County

From River Mile 2.7 to 14.6 Segment Length: 11.9

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal,

Combined Sewer Overflows, Sanitary Sewer Overflows

EPA awarded a 2003 104(b)3 grant for pathogens and organic enrichment/Low DO TMDL for the Beargrass Creek Watershed.

South Fork Gunpowder Creek Boone County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Organic Enrichment/Low DO

Suspected Sources: Agriculture, Construction (Land Development), Urban Runoff/Storm Sewers

(Erosion and Sedimentation), Municipal Point Sources (Package Plants –

Small Flows)

South Fork Gunpowder Creek Boone County

From River Mile 4.1 to 6.8 Segment Length: 2.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

UT to Pond Creek at River Mile 1.5 Oldham County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Chlorine, Nutrients, Organic Enrichment/Low DO
Suspected Sources: Municipal Point Source (Package Plants, Small Flows)

Pond Creek below the UT was listed in the 1998 303(d) Report as partially supporting aquatic life. See Pond Creek of Ohio River (Oldham County), Salt/Licking River Unit – 2nd Priority Listings. That stream segment (and now this stream segment) was listed because of impairment attributed to the River Bluffs WWTP. The listing was based on an in-stream biological assessment and the DMRs from the WWTP. The DMRs indicated that the limits for chlorine and ammonia were being met for most of 1999 and part of 2000, but were not being met for part of 2000 and most of 2001.

Woolper Creek of Ohio River Boone County

From River Mile 2.8 to 7.2 Segment Length: 4.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban Runoff/Storm Sewers

The segment is outside SD#1's service area, but the upstream end of the segment is at the confluence with Allen Fork, which is listed as impaired. Allen Fork is in SD#1's service area. The Allen Fork listing contains information on remediation activities in the Allen Fork watershed. See Salt/Licking River Unit $-2002\ 303$ (d) List -2^{nd} Priority Listings.

Woolper Creek of Ohio River Boone Creek

From River Mile 11.5 to 13.6 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Nutrients, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow), Suspended Solids, Pathogens

Suspected Sources: Construction, Urban Runoff/Storm Sewers, Municipal Point Sources

(Package Plants - Small Flows), Land Disposal, Hydromodification

This listing for nonsupport of aquatic life is from the 1998 303(d) Report. Fecal coliform monitoring in 1999 showed that this reach is also in nonsupport of the swimming use. More recently, approximately 50 homes with failing septic systems have been incorporated into SD#1's sanitary sewer network. The entire upper part of the watershed should be sewered by summer 2004. A package WWTP at River Mile 11.8 has also recently been eliminated and the flow incorporated into SD#1's sanitary sewer system.

Salt River Basin

Big South Fork of Rolling Fork

Marion County

From River Mile 0.0 to 12.4 Segment Length: 12.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources)

(Blue) Spring Ditch of Northern Ditch

Jefferson County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Metals (Cadmium and Zinc).

Suspected Sources: Municipal Point Sources, Industrial Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

The listing in the 1998 303(d) Report was 'Spring Ditch' and was for pathogens. The USGS 1:24,000 topographic map lists the stream as 'Blue Spring Ditch.' The listing for metals is based on more recent assessment information from MSD. The MSD data report states that the cadmium data should be used with caution. Additional monitoring data for cadmium are being collected by KDOW.

Brooks Run of Floyds Fork

Bullitt County

From River Mile 0.0 to 6.1 Segment Length: 6.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Organic Enrichment/Low DO, Nutrients
Suspected Sources: Municipal Point Sources (Package Plants – Small Flows)

This listing (except for nutrients) is from the 1998 303(d) Report. The TMDL for pathogens and organic enrichment/low DO has been submitted to EPA Region 4 for approval. See Salt/Licking Unit – TMDLs Under Development.

Chaplin River of Beech Fork Mercer County

From River Mile 63.0 to 69.7 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>Chenoweth Run of Floyds Fork</u>

Jefferson County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)

Pollutant(s): Nutrients, Noxious Aquatic Plants, Pathogens

Suspected Sources: Municipal Point Sources, Industrial Point Sources, Agriculture (Grazing-

related Sources), Urban Runoff/Storm Sewers, Land Disposal

See Approved TMDLs for Nutrients.

Chenoweth Run of Floyds Fork

Jefferson County

From River Mile 5.3 to 9.1 Segment Length: 3.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Industrial Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

Clear Creek of Bullskin Creek Shelby County

From River Mile 0.0 to 11.0 Segment Length: 11.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Urban Runoff/Storm Sewers, Agriculture (Crop-related Sources), Agriculture

(Grazing-related Sources)

<u>Clear Creek of Rolling Fork</u>
Hardin County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>Crooked Creek of Rolling Fork</u>
Bullitt County

From River Mile 5.6 to 12.8 Segment Length: 7.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Sources: Unknown

<u>Curry's Fork of Floyds Fork</u> Oldham County

From River Mile 0.0 to 4.8 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)

Pollutant(s): Nutrients, Siltation, Organic Enrichment/Low DO, Habitat Alteration (Other

than Flow), Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Agriculture,

Construction, Habitat Modification (Other than Hydromodification)

East Fork of Beech Fork Washington County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Note: Northern Ditch and Fern Creek will be designated Fern Creek/Northern Ditch because the 1 - 24:000 USGS topographic map does not show a clear delineation between Northern Ditch (channelized section) and Fern Creek (natural stream section). Area residents and government agencies refer to the channelized section as Northern Ditch.

Fern Creek/Northern Ditch of Pond Creek

Jefferson County

From River Mile 0.0 to 7.5 Segment Length: 7.5

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support),

Pollutant(s): Ammonia (unionized), Nutrients, Organic Enrichment/Low DO, Pathogens Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

Fern Creek/Northern Ditch of Pond Creek

Jefferson County

From River Mile 7.5 to 12.8 Segment Length: 5.3

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport),

Pollutant(s): Cadmium, Organic Enrichment/Low DO, Pathogens, Nutrients

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

The MSD data report states that the cadmium data should be used with caution. KDOW is currently collecting additional metals data.

Floyds Fork of Salt River Jefferson/Bullitt Counties
From River Mile 0.0 to 11.6 Segment Length: 11.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Urban

Runoff/Storm Sewers, Agriculture

See Approved TMDLs.

Floyds Fork of Salt River Jefferson County

From River Mile 11.6 to 21.6 Segment Length: 10.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)
Pollutant(s): Pathogens, Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Urban

Runoff/Storm Sewers, Agriculture

See Approved TMDLs for Organic Enrichment/Low DO.

<u>Floyds Fork of Salt River</u>

Jefferson County

From River Mile 21.6 to 24.2 Segment Length: 2.6

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Urban

Runoff/Storm Sewers, Agriculture

See Approved TMDLs.

Floyds Fork of Salt River Jefferson County

From River Mile 24.2 to 31.3 Segment Length: 7.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic enrichment/Low DO, Siltation

Suspected Sources: Municipal point sources, Urban Runoff/Storm Sewers, Construction,

Agriculture

See Approved TMDLs.

Floyds Fork of Salt River Jefferson County

From River Mile 31.3 to 34.1 Segment Length: 2.8

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation

Suspected Sources: Agriculture, Construction (Land Development)

This listing is based on the 2000 Assessment Data. See Approved TMDLs.

Floyds Fork Watershed of Salt River
From River Mile 34.1 to 67.0

Jefferson/Bullitt Counties
Segment Length: 32.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources (Packages Plants – Small Flows), Urban

Runoff/Storm Sewers, Agriculture

See Approved TMDLs.

Jeptha Creek of Guist Creek Shelby County

From River Mile 0.0 to 0.7 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources)

Long Lick Creek of Salt River

Bullitt County

From River Mile 0.0 to 10.5 Segment Length: 10.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Silviculture (Logging Road Construction/Maintenance), Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Long Run of Floyds ForkJefferson CountyFrom River Mile 0.0 to 9.5Segment Length: 9.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Agriculture (Grazing-related Sources), Urban

Runoff/Storm Sewers, Land Disposal

Mill Creek of Salt River Hardin County

From River Mile 6.0 to 7.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport), Fish Consumption (Nonsupport)

Pollutant(s): Mercury

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources).

It is based on DMR data from Fort Knox. The permit requires in-stream monitoring upstream and downstream of the discharge location to define the contribution of mercury from the area. A streamflow gaging station has been installed.

Mussin Branch of Moore Creek
From River Mile 0.0 to 1.7

Marion County
Segment Length:

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): pH

Suspected Sources: Construction (Highway/Road/Bridge Construction)

See TMDLs Under Development

Pennsylvania Run of Floyds ForkJefferson/Bullitt CountiesFrom River Mile 0.0 to 3.1Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)

Pollutant(s): Nutrients, Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

This listing was in the 1998 303(d) Report but aquatic life was indicated as being impaired by organic enrichment/low DO. It is more appropriate to define the cause of the aquatic life impairment as nutrients.

Pond Creek of Salt River Jefferson County

From River Mile 5.1 to 8.1 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO, Metals, Pathogens

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Land Disposal

(Onsite Wastewater Systems – Septic Tanks), Urban Runoff/Storm Sewers,

1.7

Habitat Modifications (Other than Hydromodifications)

New assessments divided the creek into two segments. The rest of the stream is considered to be not assessed.

<u>Pond Creek of Salt River</u>

Jefferson County

From River Mile 14.7 to 16.1 Segment Length: 1.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Urban runoff/Storm Sewers

New assessments divided the creek into two segments, and this upper segment was not impaired for aquatic life because of metals.

Pope Lick Creek of Floyds Fork Jefferson County

From River Mile 2.0 to 5.2 Segment Length: 3.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

Salt River of Ohio River Bullitt County

From River Mile 11.4 to 25.2 Segment Length: 13.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture, Land Disposal (Onsite Wastewater Systems – Septic Tanks)

Salt River of Ohio River Anderson County

From River Mile 78.0 to 88.5 Segment Length: 10.5 Impaired Use(s): Swimming (Nonsupport), Fish Consumption (Partial Support)

Pollutant(s): Pathogens, Metals (Mercury)
Suspected Sources: Agriculture, Unknown

See Delisting Requests for Pathogens.

Slop Ditch of Southern Ditch (See Wetwoods Creek)

Southern Ditch of Pond Creek Jefferson County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal

Also, see Approved Delistings (Aquatic Life Use –Organic Enrichment/Low DO).

Spring (Blue Spring) Ditch of Northern Ditch

Jefferson County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Metals (Cadmium and Zinc).

Suspected Sources: Municipal Point Sources, Industrial Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

The listing for pathogens was in the 1998 303(d) Report. The USGS 1:24,000 topographic map lists the stream as 'Blue Spring Ditch.' The listing for metals is based on more recent assessment information from MSD. The MSD data report states that the cadmium data should be used with caution. Additional monitoring data should be collected for cadmium.

<u>UT of Brooks Run at River Mile 4.1</u> Bullitt County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)
Pollutant(s): Pathogens, Organic Enrichment/Low DO, Nutrients
Suspected Sources: Municipal Point Sources (Package Plants – Small Flows)

See TMDLs Under Development.

<u>UT of Rolling Fork at River Mile 94.6</u> Marion County

From River Mile 0.0 to 0.6 Segment Length: 0.6

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): pH

Suspected Sources: Construction (Highway/Road/Bridge Construction)

See TMDLs Under Development

<u>Wetwoods Creek of Southern Ditch</u> (formerly Slop Ditch)

Jefferson County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)

Pollutant(s): Metals, Flow Alterations, Pathogens

Suspected Sources: Industrial Point Sources, Municipal Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

The name of this stream segment has been changed from Slop Ditch to Wetwoods Creek. A bottom-land hardwood wetlands, which is to mitigate flooding and improve water quality of the stream below the wetlands, has been created at approximately RM 1.8 of the existing channel,. The flow has been diverted through the wetlands.

Section 2.5.2.2 2nd Priority Listings

Licking River Basin

Beaver Creek of Licking River Menifee County

From River Mile 10.0 to 14.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Riparian)

Blacks Creek of Hinkston Creek Bourbon County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Nutrients

Suspected Sources: Agriculture (Grazing-related Sources)

Boone Creek of Hinkston Creek Bourbon County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO Suspected Sources: Agriculture (Grazing-related Sources)

Caney Creek of Licking River Morgan County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration (Other than Flow) Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Christy Creek of Triplett Creek Rowan County

From River Mile 0.0 to 4.3 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Unknown

Suspected Sources: Urban runoff/Storm Sewers (Nonindustrial Permitted), Agriculture (Crop-

related Sources - Nonirrigated Crop Production)

<u>Dry Creek of Triplett Creek</u> Rowan County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Urban Runoff/Storm Sewers (Other Urban Runoff), Urban Runoff/Storm

Sewers (Highway/Road/Bridge Runoff)

Elk Fork of Licking River Morgan County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture, Silviculture, Hydromodification, Habitat Modification (Other

than Hydromodification)

Elk Fork of Licking River Morgan County

From River Mile 12.6 to 14.7 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration (Other than Flow) Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Fox Creek of Licking River Fleming County

From River Mile 0.0 to 8.8 Segment Length: 8.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing – Riparian and/or

Upland)

<u>Grassy Lick Creek of Hinkston Creek</u> Montgomery County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO Suspected Sources: Agriculture (Grazing-related Sources)

<u>Hinkston Creek of South Fork Licking River</u>

Bourbon County

From River Mile 0.0 to 12.4 Segment Length: 12.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Nutrients

Suspected Sources: Agriculture

Hinkston Creek of South Fork Licking RiverBourbon/Nicholas CountyFrom River Mile 20.8 to 31.0Segment Length: 10.2

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources)

Houston Creek of Stoner Creek Bourbon County

From River Mile 9.0 to 12.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Recreation or Tourism Activities – Other than Boating (Golf Course)

<u>Left Fork White Oak Creek of Licking River</u>

From River Mile 0.0 to 1.8

Morgan/Magoffin Counties
Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Turbidity Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface Mining, Subsurface Mining, Abandoned Mining, and Inactive Mining), Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization

<u>Licking River of Ohio River</u>
From River Mile 4.6 to 14.5

Campbell/Kenton Counties
Segment Length: 9.9

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Unknown

<u>Licking River of Ohio River</u>

Magoffin County

From River Mile 263.1 to 269.5 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Siltation, Flow Alterations, Habitat

Alterations (Other than Flow), Turbidity

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface Mining, Subsurface Mining, Abandoned Mining, and Inactive Mining), Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization)

This segment was listed in the 1998 303(d) Report as partial support of aquatic life because of organic enrichment/low DO only. The above information is based on a more recent assessment. However, a reassessment of this reach is warranted before any further action is taken.

<u>Licking River of Ohio River</u>

Magoffin County

From River Mile 269.5 to 293.3 Segment Length: 23.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Resource Extraction

Further data collected in 1999 were deemed to be inconclusive. The stream will be reassessed in 2004.

<u>Locust Creek of Licking River</u> Fleming County

From River Mile 5.7 to 11.7 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Salt Lick Creek of Licking River

Bath County

From River Mile 3.0 to 8.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Riparian)

<u>Trace Fork of Licking River</u> Magoffin County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Turbidity, Flow Alterations, Habitat Alteration (Other than Flow),

Total Dissolved Solids

Suspected Sources: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface, Subsurface, Abandoned, and Inactive Mining), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization

Ohio River Basin

Allen Fork of Woolper Creek Boone County

From River Mile 2.0 to 4.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alteration (Other than Flow)
Suspected Sources: Urban Runoff/Storm Sewers, Habitat Modification (Other than

Hydromodification).

This listing was in the 1998 303(d) Report and was based on evaluated information from the KDOW Florence Regional Office. More recently, approximately 160 homes (in Burlington) with failing septic systems are now on SD#1's sanitary sewer system. The existing pump station at River Mile 2.5 has been upgraded. A small WWTP has been eliminated (Rosetta Drive) and the flow goes to the SD#1 sanitary sewer system (at River Mile 3.7 of Allen Fork).

Big Bone Creek of Ohio River

Boone County

From River Mile 4.1 to 4.9 Segment Length: 0.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other

than Flow)

Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources),

Urban Runoff/Storm Sewers, Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank

Modification/Destabilization

Dry Creek of Ohio River Gallatin County

From River Mile 1.1 to 3.0 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Grazing-related Sources), Agriculture (Crop-related Sources),

Urban Runoff/Storm Sewers (Highway/Road/Bridge Runoff)

<u>Dry Creek of Ohio River</u>
From River Mile 0.2 to 7.0

Boone/Kenton Counties
Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Agriculture, Urban runoff/Storm Sewers,

Hydromodification

This listing was based on a biological assessment in 1999. Sanitation District #1 has replaced or lined approximately 10,000 linear feet of gravity sewer pipe (from approximately River Mile 3.1 to 5.0), refurbished 50 manholes and replaced 1,000 feet of sanitary pipe. Sanitation District #1 has also replaced approximately 2,000 feet of force main (deteriorating pipe) from approximately River Mile 6.0 to 6.5.

Goose Creek of Ohio River Jefferson County

From River Mile 0.0 to 3.2 Segment Length: 3.2 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Metals (Cadmium), Pathogens

Suspected Sources: Industrial Point Sources, Municipal Point Sources, Urban Runoff/Storm

Sewers, Land Disposal

This listing is based on Louisville and Jefferson County MSD data. It was noted that the cadmium metals data should be used with caution. KDOW is currently collecting additional metals data.

Goose Creek of Locust Creek Bracken County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Natural Causes

This assessment was conducted during drought conditions and additional data should be collected during the next watershed cycle.

Gunpowder Creek of Ohio River Boone County

From River Mile 18.9 to 21.6 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown
Suspected Sources: Unknown

<u>Lick Run Creek of Ohio River</u>
Breckinridge County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Riparian)

Little Kentucky River of Ohio River Henry County

From River Mile 21.0 to 27.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources)

Otter Creek of Ohio River Meade County

From River Mile 0.0 to 10.7 Segment Length: 10.7

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture (Grazing-related Sources).

Pond Creek of Ohio River Oldham County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Chlorine Suspected Sources: Municipal Point Sources

This stream segment was listed because of impairment attributed to the River Bluffs WWTP. The listing was based on an in-stream biological assessment and the DMRs. The DMRs indicated that the limits for chlorine and ammonia were being met for most of 1999 and part of 2000, but were not being met for part of 2000 and most of 2001. See also UT to Pond Creek in 1st Priority listings.

Salt River Basin

Beech Fork of Rolling Fork
From River Mile 39.5 to 49.7
Nelson/Washington Counties
Segment Length: 10.2

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Agriculture

Bullitt Lick Creek of Salt River

Bullitt County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Turbidity

Suspected Sources: Urban Runoff/Storm Sewers (Erosion and Sedimentation), Construction

(Land Development), Habitat Modification (Other than Hydromodification) -

Removal of Riparian Vegetation

Cartwright Creek of Beech Fork Washington County

From River Mile 0.0 to 6.6 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other

than Flow), Pathogens, Excessive Algal Growth/Chlorophyll_a

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification) - Removal

of Riparian Vegetation)

Cartwright Creek of Beech Fork Washington County

From River Mile 6.6 to 12.6 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>Cox Creek of Salt River</u> Nelson County

From River Mile 11.2 to 15.5 Segment Length: 4.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Excessive Algal Growth/Chlorophyll_a

Suspected Sources: Agriculture (Intensive Animal Feeding Operations, and Grazing-related

Sources)

The 2002 303(d) Report erroneously showed the reach as also being in Bullitt County.

Guist Creek of Brashears Creek Shelby County

From River Mile 15.4 to 27.6 Segment Length: 12.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources),

Urban Runoff/Storm Sewers, Hydromodification (Upstream Impoundment)

<u>Jones Creek of North Rolling Fork</u>
Marion County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Road Run of Cartwright Creek Washington County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Section 2.5.2.3 Impaired Waters Not Requiring TMDLs.

Stream Segments Assessed As Impaired Based Solely on Discharge Monitoring Reports (DMRs)

Ohio River Basin

Mill Creek Branch of Mill Creek Hardin County

From River Mile 0.0 to 0.7 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Ammonia (Un-ionized)
Suspected Sources: Municipal Point Sources (Package Plants – Small Flows)

DMR data showed significant noncompliance for ammonia. A Notice of Violation was issued on June 22, 2001 based on an inspection of May 31, 2001. Enforcement actions are continuing. Discussions have also been held with the City of Elizabethtown concerning the possibility of Elizabethtown incorporating this facility into its sewage treatment network.

<u>UT of Carmon Creek at River Mile 2.4</u>
Trimble/Henry Counties

From River Mile 0.9 to 1.9 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support

Pollutant(s): Chlorine

Suspected Sources: Minor Municipal Point Source

Section 2.5.3 Tennessee/Mississippi/Cumberland River Basin Unit

1st Priority Listings **Section 2.5.3.1**

Lower Cumberland River Basin

Claylick Creek of Cumberland River Crittenden/Livingston County Segment Length: 2.8

From River mile 2.0 to 4.8

Impaired Use(s):

Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Agriculture

Trigg County Dry Creek of Cumberland River (Lake Barkley)

From River Mile 4.9 to 7.4 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

Dry Fork Creek of Noah's Spring Branch **Christian County**

From River mile 5.0 to 5.8 Segment Length: 0.8

Impaired uses: Aquatic Life (Nonsupport)

Siltation Pollutant(s): Suspected Source: Unknown

Eddy Creek of Cumberland River (Lake Barkley) Lyon County

From River Mile 11.9 to 14.1 Segment Length: 2.2

Impaired Uses: Swimming (Nonsupport)

Pathogens Pollutant(s): Suspected Source: Unknown

Elk Fork of Red River Todd County

From River Mile 22.0 to 29.0 Segment Length: 7.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Toxicity, Organic Enrichment/Low DO

Suspected Source: Municipal Point Sources (Minor Municipal Point Sources)

Ferguson Creek of Cumberland River **Livingston County**

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

Hickory Creek of Cumberland River **Livingston County**

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Uses: Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

<u>Little River of Cumberland River (Lake Barkley)</u> Trigg County

From River Mile 33.1 to 34.4 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow), Nutrients, Siltation, Pathogens Suspected Source: Habitat Modification (Other than Hydromodification), Agriculture

<u>Little River of Cumberland River (Lake Barkley)</u> Christian County

From River Mile 48.4 to 61.0 Segment Length: 12.6

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow), Siltation, Nutrients, Pathogens

Suspected Source: Agriculture (Crop-related Sources), Municipal Point Sources

<u>Livingston Creek of Cumberland River</u>

Crittenden/Lyon Counties

From River mile 4.6 to 7.0 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Pathogens, Unknown Suspected Source: Unknown, Unknown

<u>Long Pond Branch of Muddy Fork Little River</u>

Trigg County

From River Mile 2.7 to 3.1 Segment Length: 0.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation
Suspected Source: Unknown

<u>Muddy Fork Little River of Little River</u>

Trigg County

From River Mile 14.5 to 26.6 Segment Length: 12.1

Impaired Uses: Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

North Fork Little River of Little River Christian County

From River Mile 0.0 to 0.3 Segment Length: 0.3

Impaired Uses: Aquatic Life (Nonsupport), Swimming (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow), Nutrients, Siltation, Pathogens Suspected Source: Municipal Point Sources, Agriculture, Urban Runoff/Storm Sewers

North Fork Little River of Little River Christian County

From River Mile 6.9 to 11.6 Segment Length: 4.7

Impaired Uses: Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Unknown Toxicity, Nutrients, Siltation, Pathogens

Suspected Source: Municipal Point Sources, Agriculture, Urban Runoff/Storm Sewers

North Fork Little River of Little River Christian County

From River Mile 11.6 to 12.3 Segment Length: 0.7

Impaired Uses: Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Flow Alterations, Habitat Alterations (Other than Flow), Pathogens Suspected Source: Habitat Modification (Other than Hydromodification), Hydromodification

(Channelization), Unknown

North Fork Little River of Little River Christian County

From River Mile 12.3 to 18.6 Segment Length: 6.3

Impaired Uses: Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

<u>Pleasant Grove Creek of Red River</u>
Logan County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)

Pollutant(s): Nutrients, Pathogens

Suspected Source: Agriculture (Grazing-related Sources), Land Disposal (Onsite Wastewater

Systems - Septic Tanks)

Richland Creek of Cumberland River Livingston County

From River Mile 0.6 to 5.3 Segment Length: 4.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

Sandy Creek of Cumberland River Livingston County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

Sinking Fork of Little River Christian County

From River Mile 13.6 to 16.6 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Organic Enrichment/Low DO, Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Skinframe Creek of Livingston Creek Lyon County

From River Mile 0.0 to 4.8 Segment Length: 4.8

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown Suspected Source: Unknown, Unknown

<u>Skinner Creek of Casey Creek</u> Trigg County

From River mile 0.0 to 5.8 Segment Length: 5.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

South Fork Little River of Little River Christian County

From River Mile 0.0 to 10.5 Segment Length: 10.5

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Siltation, Nutrients

Suspected Source: Agriculture, Urban Runoff/Storm Sewers

South Fork Little River of Little River Christian County

From River Mile 10.5 to 19.9 Segment Length: 9.4

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Nutrients

Suspected Source: Agriculture

South Fork Little River of Little River Christian County

From River Mile 20.9 to 25.4 Segment Length: 4.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

Spring Creek of Livingston Creek Lyon County

From River Mile 3.0 to 3.7 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Sugar Creek of Muddy Fork Little River Christian County

From River mile 1.0 to 1.4 Segment Length: 0.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture

Mississippi River Basin

<u>Bayou de Chien of Mississippi River</u>
From River Mile 14.0 to 25.9

Graves/Hickman Counties
Segment Length: 11.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

Caldwell Creek of Terrapin Creek Graves County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Source: Agriculture (Crop-related Production - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

<u>Cane Creek of Bayou de Chien</u>
Hickman County

From River Mile 0.0 to 5.4 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow)

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

This listing is designated First Priority because it is an Outstanding State Resource Water (OSRW) containing a federally threatened or endangered species.

Central Creek of Truman Creek Carlisle County

From River Mile 0.8 to 2.5 Segment Length: 1.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

<u>Cooley Creek of Mayfield Creek</u>

Graves County

From River Mile 0.7 to 2.3 Segment Length: 1.6

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Industrial Point Sources (Minor Industrial Point Sources)

Gilbert Creek of Mayfield Creek Graves County

From River Mile 1.8 to 3.5 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Hazel Creek of Wetland Ponds (Axe Lake)

Ballard County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Uses: Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow)

Suspected Source: Hydromodifications (Channelization)

Knob Creek of Blackamore Creek Graves County

From River Mile 1.1 to 2.2 Segment Length: 1.1

Impaired Uses: Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources)

Little Bayou de Chien of Bayou de Chien Fulton County

From River Mile 10.1 to 12.3 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture (Crop-related Sources), Habitat Modification (Other than

Hydromodification)

<u>Little Creek of Obion Creek</u>
From River Mile 0.0 to 6.2

Carlisle/Hickman County
Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Source: Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

The 2002 303(d) Report showed the ending river mile as 10.1 but it should have been 6.2.

<u>Little Cypress Creek of Obion Creek</u>
Graves County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation
Suspected Source: Unknown

Mayfield Creek of Mississippi River Carlisle County

From River Mile 8.2 to 13.5 Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow), Siltation, Pathogens, Metals (Iron,

Zinc, Copper)

Suspected Sources: Agriculture, Hydromodification (Channelization), Unknown

<u>Mayfield Creek of Mississippi River</u>

Carlisle County

From River Mile 13.5 to 14.8 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture

Mayfield Creek of Mississippi River Graves County

From River Mile 34.9 to 37.6 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Metals (Copper), Habitat Alterations (Other than Flow), Siltation Suspected Sources: Unknown, Agriculture, Hydromodification (Channelization)

Mayfield Creek of Mississippi River Calloway County

From River Mile 57.7 to 59.8 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources)

Mud Creek of Bayou de Chien Fulton County

From River Mile 0.0 to 6.4 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

Obion Creek of Mississippi River Fulton County

From River Mile 1.3 to 15.8 Segment Length: 14.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Metals

(Iron)

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization and Flow Regulations/Modifications), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Unknown

Obion Creek of Mississippi River Hickman County

From River Mile 38.6 to 42.0 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow)
Suspected Sources: Hydromodification (Channelization)

Opossum Creek of Obion Creek Graves County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Sources: Hydromodification (Channelization)

Shawnee Creek Slough of Mississippi River

Ballard County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Metals (Iron)
Suspected Source: Unknown

The pollutant of concern is metals (iron), which is tied to siltation.

South Fork Bayou de Chien of Bayou de Chien Graves County

From River Mile 2.0 to 7.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources)

This stream segment is an OSRW and contains a federally threatened and endangered species.

UT of Mayfield Creek (River Mile 24.0)

McCracken County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture

UT of Mayfield Creek (River Mile 25.6) Graves County

From River mile 1.1 to 3.5 Segment Length: 2.4

Impaired Source: Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Agriculture

<u>UT of Obion Creek (River Mile 16.3)</u>
Hickman County

From River Mile 1.6 to 2.2 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization, Hydromodification

(Channelization)

Ohio River Basin

Bayou Creek of Ohio River McCracken County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport), Minimum Criteria

(Partial Support)

Pollutant(s): Mercury, Radiation, Metals

Suspected Sources: Industrial Point Sources, Land Disposal

See Delisting Requests (for pH and Thermal Modifications).

The impairment created by radiation is more accurately defined as an impairment of the minimum criteria for all surface waters. Therefore, that impaired use has been included in this listing. The original listing for radiation was based on DMR data. There was no in-stream data available. Since that time, in-stream data has been collected at a few locations and the data indicate that there is not an in-stream water-column impairment for radiation. However, DMR data from several of the outfalls discharging to Bayou Creek show elevated values. Therefore, there is the potential that Bayou Creek immediately below those outfalls may be impaired because of radiation. This lack of information represents a data gap. The University of Kentucky has been awarded a grant to collect and report on data from Bayou Creek and to produce TMDLs for the pollutants of concern if warranted.

<u>Clanton Creek of Humphrey Creek</u>
Ballard County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Nutrients, Excessive Algal Growth/Chlorphyll_a, Flow Alterations,

Habitat Alterations (Other than Flow)

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

Excessive Algal Growth/Chlorphyll_a, has been added as a pollutant of concern.

Little Bayou Creek of Bayou Creek McCracken County

From River mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Nonsupport), Fish Consumption (Nonsupport), Minimum

Criteria (Partial Support)

Pollutant(s): PCB's, Metals, Radiation

Suspected Sources: Industrial Point Sources, Land Disposal

See Approved TMDLs (for PCBs).

The impairment created by radiation is more accurately defined as an impairment of the minimum criteria for all surface waters. Therefore, that impaired use has been included in this listing. A compilation of available data is being conducted through a grant from the Department of Energy.

Tennessee River Basin

Angle Creek of Little Cypress Creek Marshall County

From River Mile 0.0 to 0.7 Segment Length: 0.7

Impaired Use(s): Swimming (Nonsupport), Aquatic life (Partial Support)

Pollutant(s): Pathogens, Unknown Suspected Source: Unknown, Unknown

Bear Creek of Tennessee River (Kentucky Lake)

Marshall County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks), Municipal Point

Sources (Package Plants - Small Flows)

Bee Creek of Clarks River Calloway County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

Blizzard Pond of West Fork Clarks River McCracken County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Source: Unknown

<u>Champion Creek of Island Creek</u>

McCracken County

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

Clarks River of Tennessee River Calloway County

From River Mile 50.9 to 59.9 Segment Length: 9.0

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO, Siltation, Nutrients, Pathogens
Suspected Sources: Municipal Point Sources, Agriculture (Crop-related Sources)

Review of ADB on September 5, 2003 identifies impaired RM segment to be 50.9 to 59.9. This updates

the 2002 303(d) List which identified the impaired RM segment to be 50.9 to 59.2.

Clayton Creek of Clarks River Calloway County

From River Mile 3.3 to 7.1 Segment Length: 3.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown <u>Cypress Creek of Tennessee River</u>

Marshall County

From River Mile 6.3 to 7.7 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow), Siltation, Organic Enrichment/Low

DO

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Cypress Creek of Tennessee River Marshall County

From River Mile 7.7 to 9.7 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

<u>Damon Creek of West Fork Clarks River</u>

Calloway County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Unknown, Pathogens

Suspected source: Agriculture (Intense Animal Feeding Operation and Grazing-related sources)

<u>Island Creek of Tennessee River</u>

McCracken County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Uses: Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown Suspected Source: Unknown, Unknown

<u>Little Cypress Creek of Cypress Creek</u> Marshall County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Partial Support)

Pollutant(s): Unknown, Pathogens Suspected Source: Unknown, Unknown

<u>Little Cypress Creek of Cypress Creek</u>

Marshall County

From River Mile 3.4 to 6.0 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Source: Unknown

Middle Fork Clarks River of Clarks River Calloway County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)
Pollutant(s): Siltation, Organic Enrichment/Low DO, Pathogens

Suspected Source: Agriculture

Middle Fork Creek of Clarks River

Marshall County

From River Mile 0.2 to 6.6 Segment Length: 6.4

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown Suspected Source: Unknown, Unknown

<u>UT to Old Beaver Dam Slough (River Mile 0.4)</u>
Marshall County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Source: Urban Runoff/Storm Sewers

West Fork of Clarks River Graves County

From River Mile 12.8 to 16.8 Segment Length: 4.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Source: Unknown

Upper Cumberland River Basin

Bailey Creek of Clover Fork Harlan County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

Bear Creek of South Fork Cumberland River McCreary County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Source: Resource Extraction (Surface and Subsurface Mining)

Beck's Creek of Jellico Creek Whitley County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

This listing is the result of extirpation of *Phoxinus cumberlandensis* (blackside dace) from the stream segment since November 1975.

Big Indian Creek of Cumberland River

Knox County

From River Mile 0.0 to 5.1 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Construction (Land Development)

Brush Creek of Cumberland River

Knox County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Turbidity Suspected Source: Silviculture (Harvesting, Restoration, and Residue Management), Resource

Extraction (Surface Mining, Subsurface Mining, Abandoned Mining, and Inactive Mining), Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization

Brush Creek of Roundstone Creek
From River Mile 1.1 to 7.5
Rockcastle County
Segment length:6.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture, Land Disposal (Onsite Wastewater System – Septic Tanks

and/or Straight Pipes)

Buck Creek of Cumberland River Pulaski County

From River Mile 44.9 to 45.4 Segment Length: 0.5

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Mercury

Suspected Sources: Atmospheric Deposition

This listing is designated First Priority because of the presence of a federally threatened and endangered species in this OSRW reach.

Bucks Branch of Jellico Creek
From River Mile 0.0 to 2.3

Whitley/McCreary Counties
Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See Delisting Requests.

Cane Branch of Middle Fork (Beaver Creek)

McCreary County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development.

Catron Creek of Martins Fork Harlan County

From River Mile 0.0 to 8.5 Segment Length: 8.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

<u>Clover Fork of Cumberland River</u>
Harlan County

From River mile 0.0 to 29.1 Segment Length: 29.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

<u>Clover Fork of Cumberland River</u>
Harlan County

From River mile 29.1 to 30.3 Segment Length: 1.2

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes), Resource Extraction

See Approved TMDLs.

<u>Clover Fork of Cumberland River</u>
Harlan County

From River mile 30.3 to 34.5 Segment Length: 4.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

<u>Cloverlick Creek of Poor Fork</u> Harlan County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow), Suspended Solids, Pathogens Suspected Source: Resource Extraction, Land Disposal (Onsite Wastewater Systems - Septic

Tanks and/or Straight Pipes)

See Approved TMDLs.

Copperas Fork of Cooper Creek McCreary County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage).

See TMDLs Under Development.

<u>Cumberland River of the Ohio River</u>

Bell County

From River Mile 649.6 to 650.6 Segment Length: 1.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Municipal Point Sources, Land Disposal (Onsite Wastewater Systems –

Septic Tanks and/or Straight Pipes), Collection System Failure

<u>Cumberland River of the Ohio River</u>

Bell County

From River Mile 650.6 to 654.5 Segment Length: 3.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Municipal Point Sources, Land Disposal (Onsite Wastewater Systems –

Septic Tanks and/or Straight Pipes), Collection System Failure

See Approved TMDLs.

<u>Cumberland River of the Ohio River</u>

Harlan County

From River Mile 684.9 to 694.2 Segment Length: 9.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Municipal Point Sources, Land Disposal (Onsite Wastewater Systems –

Septic Tanks and/or Straight Pipes), Collection System Failure

See Approved TMDLs.

Elk Spring Creek of Beaver Creek Wayne County

From River Mile 0.0 to 7.8 Segment Length: 7.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

Ewing Creek of Cumberland River Harlan County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Urban Runoff/Storm Sewers (Erosion and Sedimentation), Resource

Extraction (Surface Mining)

Ferris Fork Creek of Marrowbone Creek Cumberland County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Agriculture (Grazing-related Sources)

<u>Jenneys Branch of Laurel Creek</u>

McCreary County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation
Suspected Source: Silviculture

This listing is designated First Priority because of the presence of a federally threatened and endangered species in this OSRW reach.

<u>Laurel Fork of Clear Fork</u> Whitley County

From River Mile 10.3 to 13.9 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Silviculture (Harvesting, Restoration, Residue Management)

This listing is designated First Priority because of the presence of a federally threatened and endangered species in this OSRW reach.

Laurel River of Cumberland River

Laurel County

From River Mile 36.6 to 46.3 Segment Length: 9.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Siltation

Suspected Sources: Agriculture (Crop-related Sources, Nonirrigated Crop Production),

Agriculture (Grazing-related source, Pasture Grazing-riparian and/or Upland), Agriculture (Intense Animal Feeding Operations), Resource

Extraction (Surface Mining)

<u>Left Fork of Straight Creek</u>

Bell County

From River mile 0.0 to 13.0 Segment Length: 13.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Suspended Solids, Low pH

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Resource

Extraction

See Approved TMDLs for Pathogens.

Little Clear Creek of Clear Creek Bell County

From River Mile 0.0 to 10.4 Segment Length: 10.4

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): pH, Habitat Alterations (Other than Flow), Siltation

Suspected Source: Resource Extraction, Silviculture

This listing has been changed to First Priority as a result of the extirpation of *Phoxinus cumberlandensis* (blackside dace) from the stream since November 1975.

Little Laurel River of Laurel River Laurel County

From River Mile 0.0 to 8.3 Segment Length: 8.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients

Suspected Source: Municipal Point Source (Major Municipal Point Sources)

<u>Little Laurel River of Laurel River</u>

Laurel County

From River Mile 8.3 to 12.4 Segment Length: 4.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Organic Enrichment/Low DO, Siltation, Habitat Alterations

(Other than Flow)

Suspected Source: Construction (Land Development), Municipal Point Sources, Agriculture

<u>Little Laurel River of Laurel River</u>

Laurel County

From River Mile 12.4 to 14.6 Segment Length: 2.2

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)
Pollutant(s): Pathogens, Nutrients, Organic Enrichment/Low DO

Suspected Sources: Municipal Point Sources, Agriculture

<u>Little Laurel River of Laurel River</u>

Laurel County

From River Mile 14.6 to 22.8 Segment Length: 8.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture (Grazing-related Sources)

<u>Little South Fork of South Fork Cumberland River</u> Wayne/McCreary Counties

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Resource Extraction

This listing is the result of extirpation of *Phoxinus cumberlandensis* (blackside dace) from the stream

since November 1975.

<u>Looney Creek of Poor Fork</u> Harlan County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

Lynn Camp Creek of Laurel River

Laurel/Knox/Whitley Counties

Samuel Laurel/Knox/Whitley Counties

From River Mile 0.0 to 4.5 Segment Length: 4.5 Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow), Oil and Grease, Suspended Solids,

Pathogens

Suspected Sources: Spills (Accidental), Urban Runoff/Storm Sewers, Habitat Modification

(Other than Hydromodification)

Marsh Creek of Cumberland River McCreary County

From River Mile 13.3 to 16.3 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation
Suspected Source: Silviculture

This stream segment is an OSRW containing a federally threatened and endangered species.

Marsh Creek of Cumberland River McCreary County

From River Mile 18.7 to 24.0 Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Resource Extraction, Agriculture

This stream segment is an OSRW and contains one or more federally threatened and endangered species.

Martins Fork of Clover Fork

Harlan County

From River Mile 0.0 to 10.1 Segment Length: 10.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Municipal Point Sources, Land Disposal (Onsite Wastewater Systems –

Septic Tanks and/or Straight Pipes)

See Approved TMDLs.

Martins Fork of Clover Fork

Harlan County

From River Mile 18.0 to 27.4 Segment Length: 9.4

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction

A recent biological assessment shows that this segment now fully supports aquatic life use. However, no pH data have been collected. Therefore, this listing has been carried forward from the 1998 303(d) Report.

Mitchell Creek of Sinking Creek

Laurel County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

Poor Fork of Cumberland River Harlan County

From River Mile 0.0 to 14.9 Segment Length: 14.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes), Municipal Point Sources (Minor Municipal Point Sources), Municipal

Point Sources (Package Plants – Small Flows)

See Approved TMDLs.

<u>Poor Fork of Cumberland River</u> Harlan County

From River Mile 14.9 to 16.3 Segment Length: 1.4

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes), Municipal Point Sources (Minor Municipal Point Sources), Municipal

Point Sources (Package Plants – Small Flows), Construction

See Approved TMDLs.

Poor Fork of Cumberland River Harlan County

From River Mile 16.3 to 25.1 Segment Length: 8.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes), Municipal Point Sources (Minor Municipal Point Sources), Municipal

Point Sources (Package Plants – Small Flows)

See Approved TMDLs.

Poor Fork of Cumberland River Harlan County

From River Mile 25.1 to 27.5 Segment Length: 2.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes), Municipal Point Sources (Minor Municipal Point Sources), Municipal

Point Sources (Package Plants – Small Flows)

Richland Creek of Cumberland River Knox County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Partial Support)
Pollutant(s): Siltation, Organic Enrichment/Low DO, Pathogens

Suspected Source: Resource Extraction (Surface Mining), Construction (Highway/Road/Bridge

Construction), Construction (Land Development), Unknown

See Approved TMDLs.

Richland Creek of Cumberland River Knox County

From River Mile 6.2 to 19.6 Segment Length: 19.6

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Source: Unknown

See Approved TMDLs.

Roaring Paunch Creek of South Fork Cumberland River
From River Mile 0.0 to 15.6

McCreary County
Segment Length: 15.6

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The latest biological assessment information shows that the stream fully supports the aquatic life use. However, it will remain on the 303(d) list until more pH data are collected.

Roundstone Creek of Rockcastle River Rockcastle County

From River Mile 16.9 to 23.7 Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Habitat Alterations (Other than Flow), Flow

Alterations

Suspected Source: Agriculture (Grazing-related Sources), Hydromodification (Channelization),

Habitat Modification (Other than Hydromodification)

This OSRW stream reach is designated First Priority because of the presence of a federally threatened and endangered species.

Ryans Creek of Jellico CreekMcCreary/Whitley CountiesFrom River Mile 0.0 to 5.3Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH, Suspended Solids

Suspected Source: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development for pH.

Sims Fork of Left Fork Straight Creek Bell County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Source: Unknown

This OSRW stream segment contains a federally threatened and endangered species.

South Fork Rockcastle River of Rockcastle River

Laurel County

From River Mile 20.8 to 21.5 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture (Crop-related Sources), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

Stoney Fork of Bennetts Fork Bell County

From River Mile 0.0 to 5.2 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Turbidity

Suspected Source: Silviculture (Harvesting, Restoration, and Residue Management), Habitat Modification (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization

Stoney Fork of Straight Creek Bell County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Turbidity Suspected Source: Silviculture (Harvesting, Restoration, and Residue Management), Habitat

Modification (Other than Hydromodification) - Removal of Riparian Vegetation and Bank Modification/Destabilization, Resource Extraction

(Surface, Subsurface, Abandoned, and Inactive Mining)

Straight Creek of Cumberland River Bell County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes), Resource Extraction

See Approved TMDLs for pathogens.

Straight Creek of Cumberland River Bell/Harlan Counties

From River Mile 1.7 to 23.5 Segment Length: 21.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

<u>UT of Jennys Branch at River Mile 3.4</u>
McCreary County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Siltation, Nutrients

Suspected Source: Urban runoff/Storm Sewers (Erosion and Sedimentation), Land Disposal

(Onsite Wastewater System - Septic Tanks and/or Straight Pipes)

UT of Little Laurel River at River Mile 15.8 Laurel County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

White Oak Creek of Rock Creek McCreary County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Metals, pH, Habitat Alterations

Suspected Source: Resource Extraction

See TMDLs Under Development for pH.

White Oak Creek of Sinking Creek

Laurel County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Suspended Solids, Turbidity

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Source - Pasture Grazing - Riparian and/or Upland), Urban Runoff/Storm Sewers (Erosion and Sedimentation)

Whitley Branch of Little Laurel River

Laurel County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Nutrients, Organic Enrichment/Low DO, Pathogens
Suspected Sources: Municipal Point Sources, Collection System Failure

Whitley Branch of Little Laurel River

Laurel County

From River Mile 1.0 to 2.5 Segment Length: 1.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure

Wildcat Branch of Cumberland River Pulaski County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Source: Resource Extraction (Acid Mine Drainage)

See TMDls Under Development.

Wolf Creek of Clear Fork Whitley County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production) Resource

Extraction (Surface Mining)

Yocum Creek of Clover Fork Harlan County

From River Mile 0.0 to 6.5 Segment Length: 6.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

Section 2.5.3.2 2nd Priority Listings

Lower Cumberland Basin

<u>Casey Creek of Little River</u> Trigg County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Sources Outside State Jurisdiction or Borders

Donaldson Creek of Cumberland Creek Trigg County

From River Mile 9.6 to 14.2 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)
Suspected Source: Resource Extraction (Dredge Mining)

<u>Dry Creek of Eddy Creek</u> Caldwell County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Eddy Creek of Cumberland River (Lake Barkley) Caldwell County

From River Mile 16.9 to 19.7 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Ferguson Creek of Cumberland River Livingston County

From River Mile 1.1 to 2.2 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Kenady Creek of Muddy Fork Trigg County

From River Mile 0.0 to 3.9 Segment Length: 3.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

<u>Little River of Cumberland River (Lake Barkley)</u>
Trigg County

From River Mile 23.6 to 33.1 Segment Length: 9.5 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support)

Pollutant(s): Nutrients, Siltation, Metals (Iron), Metals (Mercury)

Suspected Sources: Agriculture (Crop-related Sources), Unknown

Iron is associated with siltation.

<u>Little River of Cumberland River (Lake Barkley)</u>
From River Mile 34.4 to 48.4

Trigg/Christian Counties
Segment Length: 14.0

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Nutrients, Siltation, Pathogens

Suspected Sources: Agriculture (Crop-related Sources), Municipal Point Sources

<u>Livingston Creek of Cumberland River</u>
From River Mile 11.6 to 15.4

Crittenden/Lyon Counties
Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown
Suspected Source: Unknown

Lyon County was added since the last report.

<u>Lower Branch of North Fork Little River</u> Christian County

From River Mile 3.7 to 9.2 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

North Fork Little River of Little River Christian County

From River Mile 0.3 to 6.9 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Nutrients, Siltation, Pathogens

Suspected Source: Municipal Point Sources, Agriculture, Urban Runoff/Storm Sewers

Red River of Cumberland River Logan County

From River Mile 50.1 to 54.2 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Red River of Cumberland River Simpson County

From River Mile 73.5 to 80.5 Segment Length: 7.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown
Suspected Source: Unknown

Sinking Fork of Little River Trigg County

From River Mile 2.2 to 5.6 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown
Suspected Source: Unknown

<u>Sugar Creek of Cumberland River</u>
Livingston County

From River mile 2.1 to 6.7 Segment Length: 4.6

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens
Suspected Source: Unknown

<u>Upper Branch North Fork Little River</u>
Christian County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Mississippi River Basin

Brush Creek of Obion Creek Graves County

From River Mile 0.0 to 8.3 Segment Length: 8.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Agriculture, Hydromodification (Channelization and Dredging)

Brush Creek of Obion Creek Hickman County

From River Mile 0.0 to 6.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Excessive

Algal Growth/ Chlorophyll_a

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

<u>Cane Creek of Shawnee Creek</u>

Ballard County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Organic Enrichment/Low DO

Suspected Source: Unknown

Goose Creek of Wilson Creek Graves County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Flow Alterations Suspected Source: Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

Hurricane Creek of Obion Creek Carlisle County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

<u>Little Bayou de Chien of Bayou de Chien</u>
From River Mile 0.0 to 2.1

Hickman/Fulton Counties
Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Agriculture, Habitat Modification (Other than Hydromodification) - Removal

of Riparian Vegetation

Fulton County has been added to the listing.

<u>Little Mud Creek of Bayou de Chien</u> Fulton County

From River Mile 0.0 to 1.8 Segment Length: 1.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production)

<u>Mayfield Creek of Mississippi River</u>
From River Mile 0.0 to 3.4

Carlisle/Ballard Counties
Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow), Flow Alterations

Suspected Source: Unknown

Mayfield Creek of Mississippi River Carlisle County

From River Mile 14.8 to 17.4 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture

<u>Mayfield Creek of Mississippi River</u>

McCracken County

From River Mile 17.4 to 32.9 Segment Length: 15.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Source: Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

Mayfield Creek of Mississippi River Graves County

From River Mile 32.9 to 34.9 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

Mayfield Creek of Mississippi River Graves County

From River Mile 37.6 to 40.8 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

Obion Creek of Mississippi RiverHickman/Graves CountiesFrom River Mile 42.0 to 47.6Segment Length:5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture (Crop-related Sources), Hydromodification (Channelization)

Obion Creek of Mississippi River Graves County

From River Mile 47.6 to 56.0 Segment Length: 8.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation
Suspected Source: Agriculture

Running Slough of Obion River (Reelfoot Lake) Fulton County

From River Mile 0.0 to 15.3 Segment Length: 15.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Turbidity

Suspected Source: Agriculture (Crop-related Sources)

Shawnee Creek of Mississippi River Ballard County

From River Mile 8.9 to 17.9 Segment Length: 9.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Agriculture, Habitat Modification (Other than Hydromodification) - Removal

of Riparian Vegetation, Hydromodification (Channelization)

Ohio River Basin

<u>Humphrey Creek of Ohio River</u>

Ballard County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification)

Humphrey Creek of Ohio River Ballard County

From River Mile 3.4 to 11.0 Segment Length: 7.6

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Source: Unknown

Massac Creek of Ohio River McCracken County

From River Mile 3.6 to 4.2 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Urban Runoff/ Storm Sewers (Highway/Road/Bridge Runoff - Erosion and

Sedimentation), Resource Extraction (Dredge Mining), Habitat Modification

(Other than Hydromodification) - Removal of Riparian Vegetation

Tennessee River Basin

<u>Camp Creek of West Fork Clarks River</u>

From River Mile 0.0 to 5.4

McCracken County

Segment Length: 5.4

Impaired Use(s): Swimming (Partial Support), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown
Suspected Source: Unknown, Unknown

Chestnut Creek of Clarks River

Marshall County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Swimming (Partial Support), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown
Suspected Source: Unknown, Unknown

<u>Clarks River of Tennessee River</u>

McCracken County

From River Mile 5.0 to 12.7 Segment Length: 7.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

<u>Clarks River of Tennessee River</u>

Calloway County

From River Mile 59.9 to 61.9 Segment Length: 2.0

Impaired Use(s): Swimming (Partial Support), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown Suspected Source: Unknown, Unknown

<u>Clayton Creek of Clarks River</u>

Calloway County

From River Mile 0.8 to 3.3 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Guess Creek of Tennessee River Livingston County

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown
Suspected Source: Unknown

Island Creek of Tennessee River McCracken County

From River Mile 5.5 to 10.3 Segment Length: 4.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Jonathan Creek of Tennessee River (Kentucky Lake) Calloway/Marshall Counties

From River Mile 6.2 to 18.0 Segment Length: 11.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown Middle Fork Clarks River of Clarks River Calloway County From River Mile 2.7 to 4.9 Segment Length: 2.2 Impaired Use(s): Aquatic Life (Partial Support) Pollutant(s): Organic Enrichment/Low DO, Siltation Suspected Source: Agriculture Reeves Branch of Sugar Creek Marshall County From River Mile 0.0 to 0.3 Segment Length: 0.3 Impaired Use(s): Aquatic Life (Partial Support) Pollutant(s): Unknown Suspected Source: Unknown Spring Creek of West Fork Clarks River **Graves County** From River Mile 0.0 to 1.8 Segment Length: 1.8 Impaired Use(s): Aquatic Life (Partial Support) Pollutant(s): Organic Enrichment/Low DO, Siltation, Flow Alteration Suspected Source: Channelization, Draining and Filling of Wetlands West Fork of Clarks River **Graves County** From River Mile 2.6 to 10.1 Segment Length: 7.5 Impaired Use(s): Swimming (Partial Support) Pathogens Pollutant(s): Suspected Source: Unknown West Fork of Clarks River Marshall County From River Mile 19.7 to 22.7 Segment Length: 3.0 Fish Consumption (Partial Support) Impaired Use(s): Pollutant(s): Metals (Mercury) Unknown Suspected Source: West Fork of Clarks River Calloway County From River Mile 22.7 to 27.3 Segment Length: 4.6 Impaired Use(s): Swimming (Partial Support) Pollutant(s): Pathogens Suspected Source: Unknown Calloway County West Fork of Clarks River From River Mile 33.1 to 37.2 Segment Length: 4.1 Impaired Use(s): Aquatic Life (Partial Support) Pollutant(s): Unknown Suspected Source: Unknown

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Unknown
Unknown

West Fork of Clarks River (old channel)

From River Mile 0.0 to 13.8

Graves County

Segment Length:

13.8

West Fork of Clarks River (old channel)

Marshall County

From River Mile 19.7 to 22.7 Segment Length: 3.0

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Metals (Mercury)

Suspected Source: Unknown

Upper Cumberland River Basin

Bennetts Fork of Yellow Creek Bypass Bell County

From River Mile 0.0 to 7.5 Segment Length: 7.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Big Renox Creek of Cumberland River Cumberland County

From River Mile 0.0 to 5.8 Segment Length: 5.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Briary Creek of Buck Creek Pulaski County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Resource

Extraction (Dredge Mining), Recreation and Tourism Activities (All Terrain

Vehicles)

<u>Crocus Creek of Cumberland River</u>
From River Mile 4.8 to 16.9

Cumberland/Adair Counties
Segment Length: 12.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Agriculture, Habitat Modification (Other than Hydromodification) - Removal

of Riparian Vegetation and Bank Modification/Destabilization

Crooked Creek of Roundstone Creek Rockcastle County

From River Mile 1.0 to 6.4 Segment Length: 5.4

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Source: Agriculture, Land Disposal (Onsite Wastewater Systems – Septic Tanks

and/or Straight Pipes)

Cumberland River of Ohio River Harlan County

From River Mile 660.1 to 666.7 Segment Length: 6.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Metals (Iron)
Suspected Source: Unknown

The pollutant of concern is metals (iron), but is more correctly tied to siltation.

<u>East Fork Lynn Camp Creek of Lynn Camp Creek</u>
From River Mile 0.0 to 4.5

Knox/Whitley Counties
Segment Length: 4.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Construction (Land Development)

Gilmore Creek of Crab Orchard Creek
From River Mile 0.0 to 4.7

Lincoln/Pulaski Counties
Segment Length: 4.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow), Siltation

Suspected Source: Resource Extraction (Dredge Mining)

Goodin Creek of Cumberland River Knox County

From River Mile 2.1 to 2.3 Segment Length: 0.2

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Flow Alterations

Suspected Source: Habitat Alterations (Other than Hydromodification) - Removal of Riparian

Vegetation, Hydromodification (Upstream Impoundment)

Greasy Creek of Cumberland River Bell County

From River Mile 0.0 to 11.4 Segment Length: 11.4

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

Hatchell Branch of Eagle Creek McCreary County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation
Suspected Source: Silviculture

Indian Creek of Buck Creek Pulaski County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Resource Extraction (Dredge Mining)

Little Poplar Creek of Cumberland River Knox County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Upland),

Construction (Land Development)

<u>Lynn Camp Creek of Laurel River</u>
From River Mile 4.6 to 10.7

Knox/Whitley Counties
Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Upland), Construction (Highway/Roads/Bridge Construction), Construction (Land Development), Urban Runoff/Storm Sewers (Erosion and Sedimentation)

Marrowbone Creek of Cumberland Creek Cumberland County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Martins Fork of Clover Fork Harlan County

From River Mile 10.1 to 17.0 Segment Length: 6.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Source: Unknown

Meadow Creek of Cumberland River

From River Mile 0.0 to 6.8

Whitley/Knox Counties

Segment Length: 6.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing-Upland), Resource

Extraction (Surface Mining)

Middle Fork of Richland Creek Knox County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Resource Extraction (Surface Mining), Construction (Highway/Road/Bridge

Construction and Land Development), Agriculture (Crop-related Sources –

Nonirrigated Crop Production)

Mud Creek of Clear Fork Whitley County

From River Mile 0.0 to 5.1 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Construction (Highway/Road/Bridge Construction and Land Development),

Agriculture (Crop-related Sources – Nonirrigated Crop Production)

<u>Pitman Creek of Cumberland River</u>
Pulaski County

From River Mile 4.0 to 5.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Toxicity

Suspected Source: Municipal Point Sources (Major Municipal Point Sources)

Puckett Creek of Cumberland River Bell/Harlan Counties

From River Mile 0.0 to 10.0 Segment Length: 10.0

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Source: Land Disposal (Onsite Wastewater Systems - Septic Tanks and/or Straight

Pipes)

See Approved TMDLs.

Raccoon Creek of South Fork Rockcastle River Laurel County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Habitat Alterations (Other than Flow)
Suspected Source: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources),

Silviculture, Resource Extraction

Renfro Creek of Roundstone Creek Rockcastle County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Noxious Aquatic Plants
Suspected Source: Municipal Point Source (Package Plants - Small Flows), Urban

Runoff/Storm Sewers, Hydromodification (Upstream Impoundment)

Rock Creek of South Fork Cumberland River McCreary County

From River Mile 0.0 to 4.1 Segment Length: 4.1 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development.

Rock Creek of South Fork Cumberland River McCreary County

From River Mile 16.6 to 21.9 Segment Length: 5.3

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Mercury
Suspected Source: Unknown

Sam Branch of Fishing Creek Pulaski County

From River Mile 0.0 to 0.5 Segment Length: 0.5

Impaired Source: Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Source: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Agriculture

Skegg Creek of Rockcastle River Rockcastle County

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Resource

Extraction (Surface Mining), Urban Runoff/Storm Sewers (Nonindustrial

Permitted)

South Fork of Rockcastle River Laurel County

From River Mile 21.5 to 25.5 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Flow Alterations, Habitat

Alterations (Other than Flow)

Suspected Source: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources),

Hydromodification (Channelization), Habitat Modification (Other than Hydromodification) - Removal of Riparian Vegetation and Bank

Modification/Destabilization

Stinking Creek of Cumberland River Knox County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, pH, Habitat Alterations (Other than Flow), Oil and Grease

Suspected Source: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Resource

Extraction (Surface and Abandoned Mining, Petroleum Activities),

Hydromodification (Channelization)

<u>Yellow Creek of Cumberland River</u>

Bell County

From River Mile 0.0 to 0.8 Segment Length: 0.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow),

TDS/Chlorides/Salinity

Suspected Source: Urban Runoff/Storm Sewers

Yellow Creek of Cumberland River

Bell County

From River Mile 0.8 to 8.9 Segment Length: 8.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow)

Suspected Source: Urban Runoff/Storm Sewers

Section 2.5.3.3 Impaired Waters Not Requiring TMDLs

Stream Segments Assessed As Impaired Based Solely On Discharge Monitoring Reports (DMRs).

Lower Cumberland River Basin

<u>Hammond Creek of Cumberland River</u>
Lyon County

From River Mile 2.0 to 2.2 Segment Length: 0.2

DMR information from a Municipal Point Source indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (un-ionized), chlorine, organic enrichment/Low DO, and suspended solids.

West Fork Creek of Trenton Road Todd County

From River Mile 0.6 to 1.6 Segment Length: 1.6

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates an aquatic life use impairment because of ammonia (un-ionized), organic enrichment/Low DO, and suspended solids.

Mississippi River Basin

Cane Creek of Obion Creek Graves County

From River Mile 3.2 to 4.0 Segment Length: 0.8

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), organic enrichment/Low DO, and chlorine.

<u>Long Creek of Hurricane Creek</u>

Carlisle County

From River Mile 0.0 to 0.8 Segment Length: 0.8

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), organic enrichment/Low DO, chlorine, and suspended solids.

Shawnee Creek of Mississippi River Ballard County

From River Mile 7.9 to 8.9 Segment Length: 1.0

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), organic enrichment/Low DO, and chlorine.

<u>Torian Creek of Mayfield Creek</u> Graves County

From River Mile 0.0 to 0.8 Segment Length: 0.8

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized).

Truman Creek of Mayfield Creek

From River Mile 2.0 to 3.0

Carlisle County

Segment Length: 1.0

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized) and organic enrichment/Low DO.

Ohio River Basin

Humphrey Creek of Ohio River

Ballard County

From River Mile 11.0 to 12.2

Segment Length: 1.2

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of organic enrichment/Low DO and suspended solids.

UT of Humphrey Branch at River Mile 1.6

Ballard County

From River Mile 0.0 to 1.3

Segment Length:

1.3

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized). The aquatic life listing was not shown in the 2002 303(d) Report but should have been.

UT of Massac Creek at River Mile 5.2

McCracken County

From River Mile 0.0 to 0.4

Segment Length:

0.4

DMR information from a Municipal Point Source (Package Plant - Small Flows) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), organic enrichment/Low DO and suspended solids.

UT of Massac Creek at River Mile 7.0

McCracken County

From River Mile 0.0 to 0.7

Segment Length: 0.7

DMR information from a Municipal Point Source (Package Plant - Small Flows) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), organic enrichment/Low DO and suspended solids.

UT of West Fork Massac Creek at River Mile 1.6

McCracken County

From River Mile 0.0 to 0.8

Segment Length:

0.8

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of organic enrichment/Low DO.

West Fork Massac Creek

McCracken County

From River Mile 0.0 to 0.3

Segment Length:

0.3

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates an aquatic life use impairment because of ammonia (un-ionized) and organic enrichment/Low DO.

Tennessee River Basin

Graves County

Bear Creek of West Fork Clarks River

From River Mile 0.6 to 1.6 Segment Length: 1.0

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized) and organic enrichment/Low DO.

Blizzard Pond of West Fork Clarks River McCracken County

From River Mile 4.5 to 5.5 Segment Length: 1.0

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), organic enrichment/Low DO, and suspended solids.

East Fork Clarks River Calloway County

From River Mile 5.7 to 6.7 Segment Length: 1.0

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens.

Little White Oak Creek of Tennessee River

Marshall County

From River Mile 0.9 to 1.9 Segment Length: 1.0

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of organic enrichment/Low DO.

Martin Creek of Clarks River Marshall County

From River Mile 0.0 to 0.9 Segment Length: 0.9

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized) and organic enrichment/Low DO.

UT of Chestnut Creek at River Mile 2.8 Marshall County

From River Mile 0.0 to 0.7 Segment Length: 0.7

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), organic enrichment/Low DO, and suspended solids.

Upper Cumberland River Basin

Clear Fork Branch of Spring Creek Clinton County

From River Mile 2.6 to 3.6 Segment Length: 1.0

DMR information from a Municipal Point Source indicates a swimming use impairment because of pathogens.

<u>Dry Branch of Pitman Creek</u> Pulaski County

From River Mile 0.0 to 0.3 Segment Length: 0.3

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates an aquatic life use impairment because of ammonia (un-ionized).

Moore Branch of Cannon Creek Bell County

From River Mile 0.0 to 0.4 Segment Length: 0.4

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized), pH, and organic enrichment/Low DO.

<u>UT of Bridge Fork (River Mile 5.5)</u>
McCreary County

From River Mile 0.0 to 0.1 Segment Length: 0.1

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates an aquatic life use impairment because of organic enrichment/Low DO.

UT of Clifty Creek (River Mile 6.4)

Pulaski County

From River Mile 0.0 to 0.5 Segment Length: 0.5

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates a swimming use impairment because of pathogens.

UT of Pond Creek (River Mile 6.0)

Jackson County

From River Mile 0.0 to 0.2 Segment Length: 0.2

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates an aquatic life use impairment because of ammonia (un-ionized).

UT of Pond Creek (River Mile 7.6)

Jackson County

From River Mile 0.0 to 0.2 Segment Length: 0.2

DMR information from a Municipal Point Source (Package Plant – Small Flow) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of ammonia (unionized).

Whitley Branch of Little Laurel River

Laurel County

From River Mile 0.0 to 1.0 Segment Length: 1.0

DMR information from a Municipal Point Source (Major Municipal Point Source) indicates an aquatic life use impairment because of ammonia (un-ionized).

Other Impaired Waters Not Requiring TMDLs

Lower Cumberland River Basin

<u>Little River of Cumberland River (Lake Barkley)</u>
Trigg County

From River Mile 20.4 to 23.6 Segment Length: 3.2

Impaired Uses: Aquatic Life (Nonsupport)

Pollutant(s): Flow Alterations

Suspected Sources: Hydromodification (Dam Construction, Flow Regulations/Modification)

Tennessee River Basin

Tennessee River of Ohio River

Marshall County

From River Mile 21.1 to 22.4 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support

Pollutant(s): Flow Alterations

Suspected Source: Hydromodification (Upstream Impoundment)

The impairment is a result of fish kills from nitrogen embolism because of large spillway releases from Kentucky Dam. This is pollution, not a pollutant.

Upper Cumberland River Basin

<u>Cranks Creek of Martins Fork</u> Harlan County

From River Mile 1.9 to 2.5 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Flow Alterations

Suspected Source: Hydromodification (Upstream Impoundment)

A TMDL is not required because this is impairment is defined as being caused by pollution and not a pollutant.

Laurel River of Cumberland River Laurel County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Sources: Hydromodification (Upstream Impoundment)

A TMDL is not required because this impairment is defined as being caused by pollution and not a pollutant.

Laurel River of Cumberland River

Laurel County

From River Mile 24.9 to 27.9 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Flow Alterations

Suspected Sources: Hydromodification (Upstream Impoundment)

A TMDL is not required because this impairment is defined as being caused by pollution and not a pollutant.

Section 2.5.4 Green/Tradewater River Basin Unit

Section 2.5.4.1 1st Priority Listings

Green River Basin

Bacon Creek of Nolin River Hart/Larue Counties

From River Mile 0.0 to 17.2 Segment Length: 17.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture, Land Disposal (Onsite Wastewater Treatment Systems – Septic

Tanks)

Some data collection for pathogens has been done throughout the watershed by Western Kentucky University to define the areas of the watershed contributing to the impairment.

Bacon Creek of Nolin River Hart/Larue Counties

From River Mile 17.2 to 26.3 Segment Length: 9.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation

Suspected Sources: Agriculture, Land Disposal (Onsite Wastewater Treatment Systems – Septic

Tanks)

Some data collection for pathogens has been done throughout the watershed by Western Kentucky University to define the areas of the watershed contributing to the impairment.

Bacon Creek of Nolin River Hart/Larue Counties

From River Mile 26.3 to 31.2 Segment Length: 4.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Agriculture, Land Disposal (Onsite Wastewater Treatment Systems – Septic

Tanks)

Some data collection for pathogens has been done throughout the watershed by Western Kentucky University to define the areas of the watershed contributing to the impairment.

Barren River of Green River

Allen/Monroe Counties

From Mile 110.0 to 124.3 Segment Length: 14.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Bear Creek of Green River Grayson County

From River Mile 14.5 to 22.2 Segment Length: 7.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Beech Creek of Pond Creek
From River Mile 0.0 to 3.4

Muhlenburg County
Segment Length: 3.4

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development.

Big Creek of Russell CreekAdair CountyFrom River Mile 3.0 to 8.2Segment Length 5.2Impaired Use(s):Swimming (Nonsupport), Aquatic Life (Partial Support)Pollutant(s):Pathogens, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Unknown, Habitat Modifications (Other than Hydromodifications)

Big Reedy Creek of Green RiverButler/Edmonson CountiesFrom River Mile 7.5 to 13.6Segment Length: 6.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Siltation, Habitat Alterations (Other than Flow)
Suspected Sources: Unknown, Agriculture, Habitat Modifications (Other than

Hydromodification)

Billy Creek of Valley Creek Hardin County

From River Mile 0.0 to 5.9 Segment Length: 5.9

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow)

Brier Creek of Pond River
From River Mile 0.0 to 4.7

Muhlenburg County
Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See Approved TMDLs.

Brush Fork of Long Falls Creek
From River Mile 0.0 to 3.8

McLean/Daviess Counties
Segment Length: 3.8

Impaired Use(s): Aquatic life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Siltation, pH, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop Prod),

Resource Extraction (Surface Mining), Hydromodification (Channelization),

Habitat Modifications (Other than Hydromodification) - Removal of

Riparian Vegetation

Buck Creek of Green RiverMcLean CountyFrom River Mile 0.0 to 8.0Segment Length:

Impaired Use(s): Swimming (Nonsupport), Aquatic life (Partial Support)
Pollutant(s): Siltation, Flow Alterations, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Prod), Agriculture

(Intensive Animal Feeding Operations - Concentrated Animal Feeding Operations), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian Vegetation

8.0

1.9

Buck Fork of Pond River Christian/Todd County
From River Mile 14.0 to 20.0 Segment Length:

From River Mile 14.0 to 20.0 Segment Length: 6.0
Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Siltation, Habitat Alterations (Other than Flow)
Suspected Sources: Unknown, Habitat Modifications (Other than Hydromodification)

Butler Fork of Russell Creek Adair County

From River Mile 2.3 to 4.0 Segment Length: 1.7

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Siltation, Habitat Alterations (Other than Flow)
Suspected Sources: Unknown, Habitat Modifications (Other than Hydromodification)

<u>Caney Creek of Pond Creek</u> Muhlenburg County

From River Mile 1.3 to 3.6 Segment Length: 2.3

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Salinity/TDS/Chlorides, Habitat Alterations (Other than

Flow)

Suspected Sources: Collection System Failure, Agriculture (Crop-related Sources - Nonirrigated

and Irrigated Crop Production), Hydromodification (Channelization), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian Vegetation, Urban Runoff/Storm Sewers (Other Urban Runoff and Erosion

and Sedimentation), Resource Extraction (Petroleum Activities)

The Greenville WWTP is under an Agreed Order (AO) to remedy the situation and is currently under a sewer sanction. Greenville WWTP has conducted extensive remediation of the system in complying with the AO. The remaining activity is the remediation of the East Depot Rd. lift station. KDOW anticipates full compliance of the AO in late 2004 or early 2005.

<u>Caney Creek of Pond Creek</u>
From River Mile 3.6 to 5.5

Muhlenburg County
Segment Length:

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure

The Greenville WWTP is under an Agreed Order and is currently under a sewer sanction. Greenville WWTP has conducted extensive remediation of the system in complying with the AO. The remaining activity is the remediation of the East Depot Rd. lift station. KDOW anticipates full compliance of the AO in late 2004 or early 2005.

<u>Claylick Creek of Green River</u> Warren County

From River Mile 2.0 to 3.1 Segment Length: 1.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Siltation, Habitat Alterations (Other than Flow)
Unknown, Habitat Modifications (Other than Hydromodification)

<u>Craborchard Creek of Drakes Creek</u>
Hopkins County

From River Mile 0.0 to 4.6 Segment Length: 4.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): pH, Siltation, Total Dissolved Solids, Habitat Alterations (Other than Flow)

Suspected Sources: Resource Extraction (Surface Mining, Petroleum Activities), Habitat

Modifications (Other than Hydromodification)

This assessment includes more recent data since the previous listing. See Approved TMDLs for pH.

<u>Craborchard Creek of Drakes Creek</u>
Hopkins County

From River Mile 4.6 to 7.6 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See Under Approved TMDLs.

Crooked Creek of Panther Creek Daviess Co.

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Unknown

Cypress Creek of Pond River

Muhlenburg County

From River Mile 25.0 to 33.3 Segment Length: 8.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH, Total Dissolved Solids

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development (for pH).

Additional Assessment information has recently been collected indicating that TDS is also a problem.

Deer Creek of Green River Webster County

From River Mile 8.2 to 17.5 Segment Length: 9.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Sources: Unknown

Deserter Creek of South Fork Panther Creek Daviess County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Sources: Unknown, Habitat Modifications (Other than Hydromodification),

Hydromodification (Channelization)

<u>Dorsey Run of Sinks of Nolin River</u>
From River Mile 1.9 to 3.7

Hardin/Larue Counties
Segment Length: 1.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow), Algal

Growth/Chlorophyll_a

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland), Habitat Modifications (Other than Hydromodification) - Removal

of Riparian Vegetation, Urban Runoff/Storm Sewers (Erosion and

Sedimentation)

<u>Drakes Creek of Pond River</u>
Hopkins County

From River Mile 0.0 to 8.5 Segment Length: 8.5

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development.

East Fork Deer Creek Webster County

From River Mile 0.0 to 6.8 Segment Length: 6.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Intensive Animal Feeding Operations, Concentrated Animal

Feeding Operations)

Elk Creek of Pond River Hopkins County

From River Mile 0.0 to 5.4 Segment Length: 5.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Urban

runoff/storm sewers, Habitat Modifications (Other than Hydromodification) -

Removal of Riparian Vegetation, Hydromodification (Channelization)

Elk Creek of Pond River Hopkins County

From River Mile 7.8 to 10.9 Segment Length: 3.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure

The City of Madisonville is under an interim Agreed Order to make corrections to its system. Extensive work is underway to categorize the sources (mostly SSOs), and a Sanitary Sewer Overflow Plan (SSOP) has been developed. Sewer System Evaluation Survey (SSES) study work is ongoing. Final AO is being routed for signature. Once signed, AO will be closed out.

Elk Pond Creek of Pond River Muhlenburg County

From River Mile 0.0 to 4.5 Segment Length: 4.5

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)
Pollutant(s): Pathogens, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Unknown, Habitat Modifications (Other than Hydromodification)

<u>Flat Creek of Pond River</u> Hopkins County

From River Mile 0.0 to 10.6 Segment Length: 10.6

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH, Siltation, Total Dissolved Solids

Suspected Sources: Construction (Hwy/Rd/Bridge Construction and Land Development), Urban

Runoff/Storm Sewers (Industrial Permitted, Other Urban Runoff, Illicit Hook-ups, Hwy/Rd/Bridge Runoff, and Erosion and Sedimentation), Resource Extraction (Surface Mining, Petroleum Activities, and Acid Mine

Drainage)

The 2002 303(d) Report incorrectly listed this segment as Flat Creek of Pond Creek. The TMDL for low pH is currently being developed by the Kentucky Water Resources Research Institute.

Gilles Ditch of Rhodes Creek Daviess County

From River Mile 0.0 to 4.9 Segment Length: 4.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Glens Fork of Russell Creek Adair County

From River Mile 0.0 to 8.0 Segment Length: 8.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Unknown, Agriculture (Grazing-related Sources - Pasture Grazing - Riparian

and/or Upland)

Grassy Creek of Rough River Ohio County

From River Mile 0.8 to 2.9 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Flow Alterations

Suspected Sources: Resource Extraction (Surface Mining), Hydromodification (Channelization

and Dredging)

Green River of Ohio River
From River Mile 183.5 to 250.2

Hart/Edmonson/Green Counties
Segment Length: 66.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

See Delisting Requests.

Groves Creek of Green River
From River Mile 0.0 to 6.2

Webster/Henderson Counties
Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

<u>Isaacs Creek of Pond River</u>
From River Mile 0.0 to 7.4

Muhlenberg County
Segment Length: 7.4

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Siltation, pH

Suspected Sources: Resource Extraction (Acid Mine Drainage and Inactive Mining)

<u>Jarrels Creek of Pond River</u>

Muhlenberg County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Siltation, Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Sources: Unknown, Habitat Modifications (Other than Hydromodification),

Hydromodification (Channelization and Dredging)

<u>Jarrett Fork of Caney Creek</u> Grayson County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources, Grazing-related Sources, Intensive

Animal Feeding Operations - Concentrated Animal Feeding Operations),

Hydromodification (Upstream Impoundment)

Jenny Hollow Branch of Horse Branch Ohio County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations

Suspected Sources: Agriculture (Grazing-related Sources), Hydromodification (Channelization

and Dredging), Habitat Modifications (Other than Hydromodification) – Removal of Riparian Vegetation and Bank Modification/Destabilization

Knoblick Creek of Deer Creek Webster County

From River Mile 0.0 to 9.0 Segment Length: 9.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow), Total Dissolved Solids

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or Upland), Habitat Modifications (Other than Hydromodifications) - Removal

of Riparian Vegetation

Based on new data, the listing has been changed from partial support to nonsupport. Also, the previous listing should have had Deer Creek as the receiving stream, not the Green River.

Knoblick Creek of Panther Creek Daviess County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown <u>Lick Creek of Green River</u> Henderson County

From River Mile 0.0 to 3.7 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production)

<u>Lick Creek of Green River</u>
Henderson County

From River Mile 4.9 to 13.7 Segment Length: 8.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Hydromodification (Channelization)

<u>Little Muddy Creek of Green River</u>

Butler County

From River Mile 4.9 to 6.4 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>Little Pitman Creek of Big Pitman Creek</u>

From River Mile 5.9 to 10.1

Taylor/Green Counties

Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources)

<u>Long Falls Creek of Green River</u>

McLean County

From River Mile 0.0 to 7.5 Segment Length: 7.5

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Total Dissolved Solids,

Pathogens

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Resource Extraction (Surface Mining and Petroleum Activities),

Hydromodification (Channelization)

Based on new data, the two listings for Long Falls Creek replace the previous listing that was partial support for swimming for the segment 2.0 to 11.7.

Long Falls Creek of Green River McLean County

From River Mile 7.5 to 11.8 Segment Length: 4.3

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Siltation, pH, Total Dissolved Solids, Pathogens

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Resource Extraction (Acid Mine Drainage, Hydromodification

(Channelization), Habitat Modifications (Other than Hydromodifications) -

Removal of Riparian Vegetation

Based on new data, the two listings for Long Falls Creek replace the previous listing that was partial support for swimming for the segment 2.0 to 11.7.

Long Lick Creek of Rough River Breckinridge County

From River Mile 4.5 to 6.9 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow), Algal

Growth/Chlorophyll_a

Suspected Sources: Agriculture (Crop-related and Grazing-related Sources), Habitat

Modifications (Other than Hydromodifications) - Removal of Riparian

Vegetation

Mill Creek of Smith Creek Ohio County

From River Mile 0.0 to 3.8 Segment Length: 3.8

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Mud River of Green RiverMuhlenberg/Butler CountiesFrom River Mile 0.0 to 9.0Segment Length: 9.0

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): PCBs

Suspected Sources: Industrial Point Sources

Muhlenburg/Butler/Logan Counties

From River Mile 9.0 to 30.5 Segment Length: 21.5

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): PCBs, Mercury

Suspected Sources: Industrial Point Sources, Unknown

Mud River of Green River Logan County

From River Mile 30.5 to 64.8 Segment Length: 34.4

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): PCBs

Suspected Source: Industrial Point Sources

Muddy Creek of Green River

Butler County

From River Mile 8.3 to 12.1 Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow)
Suspected Sources: Hydromodification (Channelization)

Muddy Creek of Rough River Ohio County

From River Mile 1.9 to 3.9 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Habitat Alterations (Other than Flow)
Suspected Sources: Agriculture, Hydromodification (Channelization)

Narge Creek of Pond River Hopkins County

From River Mile 2.2 to 3.9 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Sources: Unknown

Nolin River of Green River
From River Mile 44.0 to 93.2

Hart/Hardin/Grayson Counties
Segment Length: 49.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

North Branch of South Fork Panther Creek
From River Mile 0.0 to 12.4

Hancock/Ohio Counties
Segment Length: 12.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Sources: Unknown

North Fork Panther Creek of Panther Creek

Daviess County

From River Mile 4.2 to 6.0 Segment Length: 1.8

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Habitat Alterations (Other than Flow), Flow Alterations

Suspected Sources: Unknown, Hydromodification (Channelization)

Based on new data, the previous listing has been divided into several segments.

North Fork Panther Creek of Panther Creek

Daviess County

From River Mile 6.0 to 9.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow), Flow Alterations

Suspected Sources: Hydromodification (Channelization)

Based on new data, the previous listing has been divided into several segments.

Old Panther Creek of Panther Creek

Daviess County

From River Mile 0.4 to 5.7 Segment Length: 5.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Sources: Unknown

Old Panther Creek of Panther Creek Daviess County

From River Mile 5.7 to 8.3 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Sources: Unknown

Otter Creek of Pond River Hopkins County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Flow Alterations

Suspected Sources: Collection System Failure, Agriculture (Crop-related Sources - Nonirrigated

Crop Production), Urban Runoff/Storm Sewers (Other Urban Runoff),

Hydromodification (Channelization)

<u>Panther Creek of Green River</u>

Daviess County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Urban

Runoff/Storm Sewers, Hydromodification (Channelization), Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

<u>Panther Creek of Green River</u> Daviess County.

From River Mile 2.7 to 5.6 Segment Length: 2.9

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens
Suspected Sources: Agriculture

Panther Creek of Green River Daviess County.

From River Mile 17.1 to 19.5 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients (Phosphorus), Siltation, Habitat Alterations (Other than Flow)
Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or Upland), Hydromodification (Channelization), Habitat

Modification (Other than Hydromodification) - Bank

Modification/Destabilization

Pettys Fork of Russell Creek Adair County

From River Mile 0.0 to 6.0 Segment Length: 6.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Habitat Alterations

Suspected Sources: Unknown, Agriculture (Grazing-related Sources, Pasture Grazing - Riparian

and/or Upland), Habitat Modification (Other than Hydromodification)

Pleasant Run of Drakes Creek Hopkins County

From River Mile 0.0 to 2.1 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Low pH, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Resource Extraction (Acid Mine Drainage), Habitat Modification (Other than

Hydromodification).

The pH TMDL has been approved by EPA Region 4. See Green/Tradewater Unit – Approved TMDLs. New assessment information has identified siltation and habitat alterations as pollutants of concern for this reach

<u>Pleasant Run of Drakes Creek</u> Hopkins County

From River Mile 2.1 to 7.9 Segment Length: 5.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The pH TMDL has been approved by EPA Region 4. See Green/Tradewater Unit – Approved TMDLs.

Plum Creek of Pond Creek Muhlenburg County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Land Disposal (Inappropriate Waste Disposal/Wildcat Dumping)

The Primary Recovery Facility site at Drakesboro has undergone remediation, which was completed in the fall 2000. The contaminated material has been removed and the site revegetated. Monitoring for chlorides is underway to determine the effectiveness of the remediation efforts. See Green/Tradewater Unit 1st Priority Listings - Pond Creek of Green River (RM 0.0 to 9.4).

Plum Creek of Pond CreekMuhlenberg County.From River Mile 2.5 to 4.3Segment Length:1.8

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)

Pollutant(s): Pathogens, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Unknown, Habitat Modification (Other than Hydromodification)

Pond Creek of Green RiverMuhlenburg CountyFrom River Mile 0.0 to 4.7Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport)

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Land Disposal (Inappropriate Waste Disposal/Wildcat Dumping)

Pond Creek of Green River Muhlenburg County

From River Mile 4.7 to 9.4 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Chlorides, Total Dissolved Solids, Siltation

Suspected Sources: Land Disposal (Inappropriate Waste Disposal/Wildcat Dumping), Resource

Extraction (Surface Mining and Petroleum Activities), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Bank Modification/Destabilization, Urban Runoff/Storm Sewers (Erosion

and Sedimentation).

This is the modified listing based on the most recent assessment information. The Primary Recovery Facility site at Drakesboro has undergone remediation, which was completed in the fall 2000. The contaminated material has been removed and the site revegetated. Monitoring for chlorides is continuing to determine the effectiveness of the remediation efforts.

Pond Creek of Green RiverMuhlenburg CountyFrom River Mile 9.4 to 13.6Segment Length: 4.2

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Total Dissolved Solids, Siltation, pH, Habitat Alterations (Other than Flow)
Suspected Sources: Resource Extraction (Surface Mining, Petroleum Activities, and Acid Mine

Drainage), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Bank Modification/Destabilization.

The low pH TMDL is currently being developed by the Kentucky Water Resources Research Institute. See Green/Tradewater Unit - TMDLs Under Development.

<u>Pond Creek of Green River</u>

Muhlenburg County

From River Mile 13.6 to 16.3 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Low pH, Habitat Alterations (Other than Flow)
Suspected Sources: Resource Extraction (Acid Mine Drainage)

The low pH TMDL is currently being developed by the Kentucky Water Resources Research Institute. See Green/Tradewater Unit - TMDLs Under Development.

Pond Creek of Green River Muhlenburg County

From River Mile 16.3 to 20.0 Segment Length: 3.7

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Low pH, Habitat Alterations (Other than Flow)

Suspected Sources: Resource Extraction (Acid Mine Drainage), Hydromodification

(Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian Vegetation, Urban Runoff/Storm Sewers (Erosion and Sedimentation), Agriculture (Crop-related Sources - Nonirrigated and

Irrigated Crop Production)

The low pH TMDL is currently being developed by the Kentucky Water Resources Research Institute. See Green/Tradewater Unit - TMDLs Under Development.

<u>Pond Creek of Green River</u>
From River Mile 20.0 to 23.8

Muhlenburg County
Segment Length: 3.8

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Low pH, Habitat Alterations (Other than Flow)

Suspected Sources: Resource Extraction (Acid Mine Drainage), Habitat Modifications (Other

than Hydromodification) - Removal of Riparian Vegetation and Bank

Modification/Destabilization

The low pH TMDL is currently being developed by the Kentucky Water Resources Research Institute. See Green/Tradewater Unit - TMDLs Under Development.

Poplar Grove Branch of Big Brush CreekTaylor/Green CountiesFrom River Mile 0.0 to 3.0Segment Length:3.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown Render Creek of Lewis Creek Ohio County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH, Total Dissolved Solids, Siltation, Habitat Alterations (Other

than Flow)

Suspected Sources: Resource Extraction (Acid Mine Drainage), Urban Runoff/Storm Sewers

(Erosion and Sedimentation), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

See TMDLs Under Development.

Rhodes Creek of Panther Creek Davis County

From River Mile 0.0 to 7.3 Segment Length: 7.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alteration (other than flow), Siltation, Nutrients (Phosphorus)
Suspected Sources: Agriculture, Irrigated and nonirrigated crop production, Hydromodification

(channelization), Habitat modification, Removal of Riparian vegetation.

New assessments divided the creek onto two segments. RM 0.0 to 6.4 and RM segment 6.4 to 7.3. This

listing combines the two segments.

Richland Slough of Green River
From River Mile 0.0 to 6.2

Henderson/Daviess Counties
Segment Length: 6.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Hydromodification (Channelization)

Russell Creek of Green River Adair County

From River Mile 40.0 to 41.5 Segment Length: 1.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Salt Lick Creek of Gasper River Warren County.

From River Mile 0.0 to 1.3 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification) - Removal

of Riparian Vegetation

South Fork Panther Creek of Panther Creek

Daviess County

From River Mile 0.0 to 9.5 Segment Length: 9.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow), Flow Alterations

Suspected Sources: Hydromodification (Channelization)

South Fork Panther Creek of Panther Creek

Daviess County

From River Mile 9.5 to 13.5 Segment Length: 4.0

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Siltation, Nutrients, Habitat Alterations, Flow Altrations Suspected Sources: Crop Production, Pasture Grazing, Channelization, Habitat Modifications

South Fork Russell Creek – See UT to South Fork Russell Creek.

Sycamore Branch of Bear Creek Edmonson County.

From River Mile 0.0 to 1.5 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>Taylor Fork of Bear Creek</u> Grayson County

From River Mile 0.0 to 4.0 Segment Length: 4.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or

Upland), Urban Runoff/Storm Sewers

Three Lick Fork of Muddy Creek Ohio County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Flow Alterations, Excessive Algal Growth/Chlorophyll_a,

Nutrients

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Resource Extraction (Surface Mining), Hydromodification (Channelization),

Habitat Modifications (Other than Hydromodification) - Removal of

Riparian Vegetation

Town Branch of Mud River Logan County

From River Mile 0.0 to 6.7 Segment Length: 6.7

Impaired Use(s): Fish Consumption (Nonsupport)

Pollutant(s): PCBs

Suspected Sources: Industrial Point Sources

UT of Cool Springs Creek at River Mile 2.6 Adair County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture, Habitat Modification (Other than Hydromodification) - Removal

of Riparian Vegetation

<u>UT of Elk Creek at River Mile 8.8</u>
Hopkins County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure

The City of Madisonville is under an Agreed Order to make corrections to its system. Extensive work is under way to categorize the sources (mostly SSOs), and a Sanitary Sewer Overflow Plan (SSOP) has been developed. Sewer System Evaluation Survey (SSES) study work is also ongoing.

UT of Flat Creek at River Mile 1.9 Hopkins County

From River Mile 0.0 to 3.1 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>UT of Flat Creek at River Mile 1.9</u> Hopkins County

From River Mile 3.1 to 4.1 Segment Length: 1.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure

This listing is from the 1998 303(d) Report. The City of Madisonville is under an interim Agreed Order (AO) to make corrections to its system. Extensive work is under way to categorize the sources (mostly SSOs), and a Sanitary Sewer Overflow Plan (SSOP) has been developed. Sewer System Evaluation Survey (SSES) study work is also ongoing. Final AO is forthcoming.

<u>UT of Pond Creek at River Mile 8.8</u> Muhlenberg County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

UT of South Fork Russell Creek at River Mile 4.85 Green County

From River Mile 0.0 to 0.6 Segment Length: 0.6

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/TDS/Chlorides

Suspected Sources: Resource Extraction (Petroleum Activities)

UT of West Fork Lewis Creek at River Mile 1.4 Ohio County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

<u>UT of Wiggington Creek at River Mile 3.5</u>
Logan County

From River Mile 0.9 to 1.9 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown
Suspected Sources: Unknown

<u>Valley Creek of Nolin River</u> Hardin County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown Suspected Sources: Unknown, Unknown

<u>Valley Creek of Nolin River</u>

Hardin County

From River Mile 8.0 to 10.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Nutrients, Flow Alterations, Habitat Alterations (Other than Flow)

Suspected Sources: Industrial Point Sources, Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation and Bank Modification/Destabilization, Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources), Urban Runoff/Storm Sewers

(Hwy/Rd/Bridge Runoff)

<u>Valley Creek of Nolin River</u> Hardin County

From River Mile 10.3 to 11.8 Segment Length: 1.5

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

West Fork of Pond River
From River Mile 19.6 to 26.0

Christian/Hopkins Counties
Segment Length: 26.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Ohio River Basin

Bayou Creek of Ohio River Livingston County

From River Mile 0.0 to 17.3 Segment Length: 17.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow)

Suspected Sources: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Bear Run of Clover Creek

Breckinridge County

Sagrant Langth:

From River Mile 1.5 to 1.9 Segment Length: 0.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow)

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or

Upland), Silviculture (Harvesting, Restoration, Residue Management),

Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Butchers Branch of Blackford Creek Hancock County

From River Mile 0.0 to 2.3 Segment Length: 2.3

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development.

<u>Casey Creek of Highland Creek</u> Union County

From River Mile 0.6 to 9.5 Segment Length: 8.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Total Dissolved Solids, Habitat Alterations (Other than Flow)
Suspected Sources: Agriculture (Crop-related Sources - Irrigated Crop Production),

Hydromodification (Channelization and Dredging), Resource Extraction

(Petroleum Activities)

<u>Crooked Creek of Ohio River</u>

Crittenden County

From River Mile 22.3 to 23.3 Segment Length: 1.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure

The City of Marion's wastewater treatment plant and collection system are being upgraded.

<u>Deer Creek of Ohio River</u>
Livingston/Crittenden Counties

From River Mile 0.0 to 7.9 Segment Length: 7.9

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Goose Pond Ditch/Wardens Slough Union County

From River Mile 0.0 to 14.0 Segment Length: 14.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Highland Creek of Ohio River Union County

From River Mile 0.0 to 7.1 Segment Length: 7.1

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)

Pollutant(s): Pathogens, Unknown

Suspected Sources: Agriculture, Hydromodification (Bridge Construction), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation and Bank Modification/Destabilization)

Sugg Creek of Cypress Creek/Dennis O'Nan Ditch Union County

From River Mile 0.0 to 1.4 Segment Length: 1.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Turbidity, Habitat Alterations (Other than Flow), Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modifications (Other than

Hydromodification) - Removal of Riparian Vegetation

Tradewater River Basin

<u>Caney Creek of Donaldson Creek</u>

Caldwell County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

<u>Caney Creek of Tradewater River</u>

Hopkins County

From River Mile 0.0 to 8.8 Segment Length: 8.8

Impaired Use Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant of Concern Siltation, pH, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Sources: Resource Extraction (Surface Mining and Acid Mine Drainage),

Hydromodification (Channelization), Habitat Modifications (Other than

Hydromodification) - Removal of Riparian Vegetation

<u>Clear Creek of Tradewater River</u>

Hopkins County

From River Mile 0.0 to 2.7 Segment Length: 2.7

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Unknown

<u>Clear Creek of Tradewater River</u>

Hopkins County

From River Mile 25.5 to 26.5 Segment Length: 1.0

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure

Copper Creek of Richland Creek Hopkins County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Total Dissolved Solids, pH, Metals (Iron, Zinc)

Suspected Sources: Unknown

<u>Copperas Creek of Caney Creek</u>
Hopkins County

From River Mile 0.0 to 3.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Total Dissolved Solids, pH, Metals (Iron, Zinc, Cadmium, Nickel)

Suspected Sources: Unknown

<u>Craborchard Creek of Tradewater River</u>
Webster County

From River Mile 1.4 to 8.8 Segment Length: 7.4

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown <u>Cypress Creek of Tradewater River</u>

Union County

From River Mile 0.0 to 2.25 Segment Length: 2.25

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Unknown

Hurricane Creek of Tradewater River Hopkins County

From River Mile 0.7 to 2.2 Segment Length: 1.5

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)
Pollutant(s): Metals (Iron, Zinc), pH, Total Dissolved Solids

Suspected Sources: Unknown

<u>Lick Creek of Clear Creek</u> Hopkins County

From River Mile 0.0 to 12.1 Segment Length: 12.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation

Suspected Sources: Resource Extraction (Surface Mining)

Richland Creek of Clear Creek Hopkins County

From River Mile 0.0 to 4.4 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Flow Alterations

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian); Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Hydromodification (Channelization)

<u>Tradewater River of Ohio River</u>

Union County

From River Mile 0.0 to 16.7 Segment Length: 16.7

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens Suspected Sources: Agriculture

Tyson Branch of Tradewater River Caldwell County

From River Mile 0.0 to 2.5 Segment Length: 2.5

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown

Suspected Sources: Habitat Modifications (Other than Hydromodification)

UT of Clear Creek (River Mile 24.4)

Hopkins County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Collection System Failure, Municipal Point Sources (Package Plants - Small

Flows)

<u>UT of Unnamed Ditch (River Mile 0.2) of Slover Creek (River Mile 3.4)</u> Webster County From River Mile 0.2 to 1.2 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Salinity/TDS/Chlorides, Flow Alterations

Suspected Sources: Agriculture, Resource Extraction (Surface Mining), Hydromodification

(Channelization)

Ward Creek of Flynn Fork Caldwell County

From River Mile 4.9 to 10.1 Segment Length: 5.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Unknown Suspected Sources: Unknown

Weirs Creek of Clear Creek Hopkins County

From River Mile 0.0 to 5.0 Segment Length: 5.0

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Turbidity, Habitat Alterations

(Other than Flow)

Suspected Sources: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Agriculture (Crop-related Sources - Nonirrigated Crop

Production), Hydromodification (Channelization)

Wolf Creek of Tradewater River Crittenden County

From River Mile 0.0 to 1.2 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

Section 2.5.4.2 2nd Priority Listings

Green River Basin

Adams Fork of Rough River Ohio County

From River Mile 0.0 to 4.6 Segment Length 4.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Barren River of Green River Warren County

From River Mile 29.4 to 35.0 Segment Length: 5.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Metals (Lead)

Suspected Sources: Urban Runoff/Storm Sewers

See Delisting Requests and Approved Delistings.

Barren River of Green River Warren County

From River Mile 35.0 to 43.6 Segment Length: 14.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Metals (Lead)

Suspected Sources: Urban Runoff/Storm Sewers

See Delisting Requests and Approved Delistings.

Bat East Creek of Pond Creek Muhlenberg County

From River Mile 0.0 to 3.3 Segment Length: 3.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Total Dissolved Solids, Habitat Alterations (Other than Flow), Siltation Suspected Sources: Agriculture (Crop-related sources - Nonirrigated and Irrigated Crop

Production), Resource Extraction (Surface Mining and Petroleum Activities), Hydromodification (Channelization), Habitat Modifications (Other than

Hydromodification) - Removal of Riparian Vegetation

Bat East Creek of Pond Creek
From River Mile 3.3 to 7.1

Muhlenberg County
Segment Length 3.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Total Dissolved Solids, Unknown

Suspected Sources: Resource Extraction (Surface Mining and Petroleum Activities), Unknown

Bear Creek of Green River Grayson County

From River Mile 22.3 to 31.7 Segment Length: 9.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown Suspected Sources: Unknown

Big Pitman Creek of Green River Green County

From River Mile 0.0 to 13.6 Segment Length: 13.6

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Unknown

Big Pitman Creek of Green River Taylor County

From River Mile 26.9 to 32.0 Segment Length: 5.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Nutrients, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Sources: Agriculture (Crop-related Sources), Agriculture (Grazing-related Sources),

Resource Extraction (Dredge Mining), Hydromodification (Dredging), Habitat Modifications (Other than Hydromodification) - Removal of

Riparian Vegetation and Bank Modification/Destabilization

Brush Creek of Green River Casey County

From River Mile 0.0 to 6.2 Segment Length: 6.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing, Riparian and /or

Upland)

Buck Creek of Buck Fork of Pond River Christian County

From River Mile 1.3 to 7.4 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Habitat Modifications (Other than Hydromodification)

Burnett Fork of North Fork Panther Creek Daviess County

From River Mile 0.0 to 1.3 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian Vegetation and Bank

Modifications/Destabilization

Calhoun Creek of Green River Casey County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing, Riparian and /or

Upland)

<u>Cane Run of South Fork Panther Creek</u>
Daviess County

From River Mile 0.0 to 3.6 Segment Length: 3.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients (Phosphorus), Siltation, Organic Enrichment/Low DO, Habitat

Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Hydromodification (Channelization)

Caney Creek of Pond Creek Muhlenberg County

From River Mile 0.0 to 1.3 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Salinity/TDS/Chlorides, Habitat Alterations (Other than Flow)
Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian Vegetation, Urban Runoff/Storm Sewers (Other Urban Runoff and Erosion and Sedimentation),

Resource Extraction (Petroleum Activities)

Casey Creek of Green River Adair County

From River Mile 3.7 to 4.7 Segment Length: 1.0

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Unknown

<u>Cash Creek of Green River</u> Henderson County

From River Mile 0.0 to 5.8 Segment Length: 5.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

Claylick Creek of South Fork Little Barren River

Metcalfe County

From River Mile 4.1 to 5.3 Segment Length: 1.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland). Habitat Modifications (Other than Hydromodification) - Removal

of Riparian Vegetation, Construction (Hwy/Rd/Bridge)

Cox's Run of Nolin River Hardin/Larue Counties

From River Mile 0.0 to 3.2 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Nutrients, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources and Grazing-related Sources), Habitat

Modifications (Other than Hydromodification) - Bank

Modification/Destabilization, Urban Runoff/Storm Sewers (Hwy/Rd/Bridge

Runoff and Erosion and Sedimentation)

<u>Cypress Creek of Pond River</u>
From River Mile 22.9 to 25.0

Muhlenburg County
Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

See TMDLs Under Development.

<u>Daniels Creek of Rock Lick Creek</u>

Breckinridge County

From River Mile 0.0 to 5.7 Segment Length: 5.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Sources: Habitat Modification (Other than Hydromodification)

<u>Drakes Creek of Barren River</u>
Warren County

From River Mile 0.0 to 23.5 Segment Length: 23.5

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs

Suspected Sources: Industrial Point Sources

The listing was downgraded to 2nd Priority.

<u>Dry Creek of Casey Creek</u>
From River Mile 0.0 to 3.7

Adair/Casey Counties
Segment Length: 3.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland)

East Branch of West Fork of Pond River Christian County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Habitat Modifications (Other than Hydromodification)

Ford Ditch of Rhodes Creek Daviess County

From River Mile 0.0 to 2.6 Segment Length: 2.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients (Phosphorus), Salinity/TDS/Chlorides, Habitat Alterations (Other

than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Irrigated and Nonirrigated Crop

Production), Hydromodification (Channelization and Dredging), Resource

Extraction (Surface Mining and Petroleum Activities)

Green River of Ohio River McLean/Ohio/Butler/Muhlenburg

From River Mile 71.3 to 108.6 Counties

Impaired Use(s): Swimming (Partial Support) Segment Length: 37.3

Pollutant(s): Pathogens Suspected Sources: Agriculture

See Delisting Requests.

Green River of Ohio River McLean/Ohio/Butler/Muhlenberg/Hart

From River Mile 207.8 to 246.4 Counties

Impaired Use(s): Fish Consumption (Partial Support) Segment Length: 38.6

Pollutant(s): Metals (Mercury)

Suspected Sources: Unknown

Havana Creek of Deer Creek Webster County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation, Hydromodification (Channelization)

<u>Indian Camp Creek of Green River</u>

Butler County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources), Habitat Modifications (Other than

Hydromodification)

<u>Indian Camp Creek of Green River</u>

Butler County

From River Mile 3.9 to 10.2 Segment Length: 6.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources), Habitat Modifications (Other than

Hydromodification)

<u>Joes Branch of North Fork Panther Creek</u>
Daviess County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or Upland), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

<u>Joes Run of North Fork Panther Creek</u>

Daviess County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or Upland), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

Lewis Creek of Green River Ohio County

From River Mile 0.0 to 11.8 Segment Length: 11.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Resource Extraction (Surface Mining), Habitat Modifications (Other than

Hydromodifications)

Habitat Alterations has been added as a pollutant of concern.

<u>Lindy Creek of Lynn Camp Creek</u> Hart County

From River Mile 0.0 to 0.9 Segment Length: 0.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or

Upland), Hydromodification (Dredging)

<u>Little Barren River of Green River</u>

Green/Hart Counties

From River Mile 0.0 to 8.8 Segment Length: 8.8

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Unknown

Little Beaverdam Creek of Green River Warren County

From River Mile 10.7 to 11.4 Segment Length: 0.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Silviculture (Harvesting, Restoration, Residue Management), Habitat

Modifications (Other than Hydromodifications) - Removal of Riparian

Vegetation

Little Cypress Creek of Pond River

Muhlenberg County

From River Mile 0.0 to 9.2 Segment Length: 9.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Total Dissolved Solids Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Urban Runoff/Storm Sewers (Other Urban Runoff and

Hwy/Rd/Bridge Runoff), Recreation and Tourism (Golf Courses), Resource Extraction (Surface Mining and Petroleum Activities), Hydromodification

(Channelization)

<u>Little Muddy Creek of Green River</u>

Butler County

From River Mile 6.4 to 12.9 Segment Length: 6.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Nutrients

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodifications) - Removal of Riparian

Vegetation

McGrady Creek of Cane Creek Ohio County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Habitat Modifications (Other than Hydromodifications)

<u>Muddy Creek of Caney Creek</u> Ohio County

From River Mile 0.0 to 6.1 Segment Length: 6.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Habitat Modifications (Other than Hydromodifications)

<u>Muddy Creek of Green River</u>

Butler County

From River Mile 12.1 to 14.9 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodifications) - Removal of Riparian

Vegetation

Muddy Creek of Rough River Ohio County

From River Mile 5.9 to 9.1 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Agriculture (Intensive Animal Feeding Operations - Concentrated Animal

Feeding Operations), Hydromodification (Channelization)

North Fork Barnett Creek of Barnett Creek Ohio County

From River Mile 0.0 to 2.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modification (Other than

Hydromodification) - Removal of Riparian Vegetation

North Fork Panther Creek of Panther Creek Daviess County

From River Mile 0.0 to 4.2 Segment Length: 4.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Agriculture (Grazing-related Sources, Pasture Grazing -

Riparian and/or Upland), Hydromodification (Channelization)

Based on new data, the previous listing has been divided into several segments.

North Fork Panther Creek of Panther Creek Daviess County

From River Mile 9.5 to 12.7 Segment Length: 3.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients (Phosphorus), Habitat Alterations

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Hydromodification (Channelization)

Based on new data, the previous listing has been divided into several segments.

<u>Pigeon Creek of Muddy Creek</u>

Ohio County

From River Mile 0.0 to 2.9 Segment Length: 2.9

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Salinity/TDS/Chlorides

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Resource Extraction (Acid Mine Drainage)

Pond Creek of Green River Muhlenburg County

From River Mile 0.0 to 4.7 Segment Length: 4.7

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Unknown

Pond Drain of Cypress Creek McLean County

From River Mile 0.0 to 2.0 Segment Length: 2.0

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Salinity/TDS/Chlorides

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production); Habitat

Modification (Other than Hydromodification) - Removal of Riparian

Vegetation

Pond River of Green River McLean/Muhlenburg/Hopkins Counties

From River Mile 1.0 to 20.8 Segment Length: 19.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow), Salinity/TDS/Chlorides

Suspected Sources: Resource Extraction

The 2002 listing (RM 1.0 to 31.1) has been divided into several segments based on recent monitoring.

<u>Pond River of Green River</u>
From River Mile 20.8 to 31.1

Muhlenburg/Hopkins Counties
Segment Length: 10.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Resource Extraction

Pond River of Green River Christian County

From River Mile 69.1 to 79.7 Segment Length: 10.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Habitat Modifications (Other than Hydromodification)

Rhodes Creek of Green River Daviess County

From River Mile 0.0 to 1.9 Segment Length: 1.9

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Municipal Point Sources (Major Municipal Point Sources), Urban

Runoff/Storm Sewers (Other Urban Runoff)

Sandlick Creek of Pond Creek Muhlenberg County

From River Mile 0.0 to 3.0 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland), Habitat Modification (Other than Hydromodification) - Removal of

Riparian Vegetation

South Fork Beaver Creek of Beaver Creek Barren County

From River Mile 1.2 to 5.9 Segment Length: 4.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Flow Alterations

Suspected Sources: Urban Runoff/Storm Sewers (Hwy/Rd/Bridge Runoff), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation

Sputzman Creek of Green River Henderson County

From River Mile 1.0 to 4.1 Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Nutrients, Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources and Grazing-related Sources),

Hydromodification (Flow Regulation/Modification)

Sunfish Creek of Bear Creek
From River Mile 6.6 to 9.7

Grayson/Edmonson Counties
Segment Length: 3.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture, Habitat Modifications (Other than Hydromodification) -

Removal of Riparian Vegetation and Bank Modification/Destabilization

Sweepstake Branch of South Fork Panther Creek Daviess County

From River Mile 1.0 to 3.8 Segment Length: 2.8

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Habitat Alterations (Other than Flow)
Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian Vegetation and Bank

Modification/Destabilization

UT of Butler Branch at River Mile 1.3 Adair County

From River Mile 0.0 to 1.7 Segment Length: 1.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or

Upland), Habitat Modification (Other than Hydromodification) - Removal of

Riparian Vegetation

UT of Cypress Creek at River Mile 28.4 Muhlenberg County

From River Mile 0.0 to 1.6 Segment Length: 1.6

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)

Suspected Sources: Habitat Modification (Other than Hydromodification) - Removal of Riparian

Vegetation, Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop Production), Agriculture (Grazing-related Sources, Pasture Grazing - Riparian and/or Upland), Urban Runoff/Storm Sewers (Other Urban Runoff)

West Fork Drakes Creek of Drakes Creek
From River Mile 0.0 to 23.4

Warren/Simpson Counties
Segment Length: 23.4

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Priority Organics (PCBs)
Suspected Sources: Industrial Point Sources

Declining PCB levels in fish have resulted in downgrading from 1st to 2nd Priority.

West Fork Pond River of Pond River
From River Mile 1.6 to 8.9

Christian/Hopkins Counties
Segment Length: 7.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Unknown
Suspected Sources: Unknown

Wolf Branch Ditch of Rhodes Creek Daviess County

From River Mile 0.0 to 4.1 Segment Length: 4.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients (Phosphorus), Siltation, Organic Enrichment/Low DO, Habitat

Alterations (Other than Flow)

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated and Irrigated Crop

Production), Hydromodification (Channelization), Habitat Modifications (Other than Hydromodification) - Removal of Riparian Vegetation

Wolf Lick Creek of Mud River Logan County

River Mile 3.3 to 13.7 Segment Length: 10.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Habitat Alterations (Other than Flow)
Suspected Sources: Habitat Modifications (Other than Hydromodification)

Ohio River Basin

Blackford Creek of Ohio River
From River Mile 3.6 to 8.0

Daviess/Hancock Counties
Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Habitat Alterations (Other than Flow)
Suspected Sources: Hydromodifications (Channelization)

<u>Clover Creek of Ohio River</u>
From River Mile 7.8 to 9.2

Breckinridge County
Segment Length: 1.4

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Flow Alterations

Suspected Sources: Agriculture (Crop-related Sources and Grazing-related Sources),

Hydromodification (Flow Regulation/Modification)

<u>Crooked Creek of Ohio River</u>

Crittenden County

From River Mile 0.0 to 11.7 Segment Length: 11.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients
Suspected Sources: Unknown

Rush Creek of Crooked Creek Crittenden County

From River Mile 0.0 to 1.3 Segment Length: 1.3

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Municipal Point Sources, Urban Runoff/Storm Sewers

Tradewater River Basin

Buffalo Creek of Tradewater River Hopkins County

From River Mile 0.0 to 6.7 Segment Length: 6.7

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Salinity/TDS/Chlorides, Flow Alterations, Habitat Alterations,

Excessive Algal Growth/Chlorophyll_a

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modifications (Other than

Hydromodification) - Removal of Riparian Vegetation

Bull Creek of Slover Creek Webster County

From River Mile 0.0 to 1.0 Segment Length: 1.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modifications (Other than

Hydromodification)

<u>Cane Run of Caney Creek</u> Hopkins County

From River Mile 0.0 to 3.4 Segment Length: 3.4

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL for low pH has been approved by EPA Region 4

<u>Caney Fork of Craborchard Creek</u> Webster County

From River Mile 3.5 to 7.9 Segment Length: 4.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Excessive

Algal Growth/Chlorophyll_a, nutrients

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification

<u>Castleberry Creek of Tradewater River</u> Christian County

From River Mile 0.0 to 2.2 Segment Length: 2.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Total Dissolved Solids, Habitat

Alterations (Other than Flow), Turbidity

Suspected Sources: Agriculture (Grazing-related Sources - Pasture Grazing - Riparian and/or

Upland), Habitat Modifications (Other than Hydromodification) - Removal

of Riparian Vegetation

Clear Creek of Tradewater River Hopkins County

From River Mile 19.1 to 25.5 Segment Length: 6.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Siltation, Habitat Alterations (Other than Flow), Flow Alterations,

Noxious Aquatic Plants

Suspected Sources: Resource Extraction (Surface Mining), Hydromodification (Channelization)

Craborchard Creek of Tradewater River Webster County

From River Mile 13.2 to 15.3 Segment Length: 2.1

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow), Excessive

Algal Growth/Chlorophyll_a, Nutrients

Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production), Habitat

Modifications (Other than Hydromodification) - Removal of Riparian

Vegetation, Hydromodification (Channelization)

<u>Lambs Creek of Clear Creek</u> Hopkins County

From River Mile 0.0 to 3.5 Segment Length: 3.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO, Habitat Alterations (Other than

Flow), Total Dissolved Solids, Flow Alterations, Noxious Aquatic Plants,

Excessive Algal Growth/Chlorophyll_a

Suspected Sources: Resource Extraction (Surface Mining), Hydromodification (Channelization),

Habitat Modifications (Other than Hydromodifications) - Removal of

Riparian Vegetation

<u>Lynn Fork of Craborchard Creek</u> Webster County

From River Mile 0.0 to 2.4 Segment Length: 2.4

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Flow Alterations, Habitat Alterations (Other than Flow)
Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production),

Hydromodification (Channelization), Habitat Modifications (Other than

Hydromodifications) - Removal of Riparian Vegetation

Pigeon Roost Creek of Tradewater River Crittenden County

From River Mile 0.9 to 3.9 Segment Length: 3.0

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Organic Enrichment/Low DO

Suspected Sources: Agriculture

<u>Pond Creek of Clear Creek</u> Hopkins County

From River Mile 0.0 to 5.5 Segment Length: 5.5

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation, Turbidity, Habitat Alterations (Other than Flow), Flow Alterations Suspected Sources: Agriculture (Crop-related Sources - Nonirrigated Crop Production); Habitat

Modification (Other than Hydromodification) - Removal of Riparian Vegetation, Resource Extraction (Surface Mining), Hydromodification

(Channelization)

Sugar Creek of Clear Creek Hopkins County

From River Mile 0.0 to 5.3 Segment Length: 5.3 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Low pH

Suspected Sources: Resource Extraction (Acid Mine Drainage)

The TMDL for low pH has been approved by EPA Region 4

<u>Tradewater River of Ohio River</u>
Hopkins/Caldwell Counties

From River Mile 63.0 to 92.2 Segment Length: 29.2

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Siltation

Suspected Sources: Resource Extraction

Section 2.5.4.3 Impaired Waters Not Requiring TMDLs

Stream Segments Assessed As Impaired Based Solely On Discharge Monitoring Reports.

Green River Basin

Austin Creek of Mud River Logan County

From River Mile 2.6 to 3.6 Segment Length: 1.0

DMR information from an Industrial Point Source indicates an aquatic life use impairment because of unknown toxicity. Updated TRE WET analysis performed by the Industrial Point Source indicates that the discharge is passing toxicity limits in 2003. Reassessment of the segment will be done to provide additional stream data

Black Lick Creek of Clear Fork Creek Logan County

From River Mile 11.2 to 12.2 Segment Length: 1.0

DMR information from a Municipal Point Source (Minor Municipal Point Source) indicates an aquatic life use impairment because of ammonia (un-ionized), organic enrichment/Low DO, and suspended solids.

Ohio River Basin

<u>Lead Creek of Ohio River</u>
From River Mile 3.5 to 4.5

Hancock County
Segment Length
1.0

DMR information from a Municipal Point Source (Package Plant - Small Flows) indicates a swimming use impairment because of pathogens and a possible aquatic life use impairment because of nutrients and organic enrichment/Low DO.

Section 2.5.5 Big Sandy/Little Sandy/Tygarts River Basin Unit

Section 2.5.5.1 1st Priority Listings

Big Sandy River Basin

Beaver Creek of Levisa Fork Floyd County

From River Mile 0.0 to 7.0 Segment Length: 7.0

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Siltation, Pathogens

Suspected Sources: Resource Extraction, (Land Disposal (Onsite Wastewater Systems – Septic

Tanks and/or Straight Pipes)

<u>Levisa Fork of Big Sandy River</u>

Lawrence County

From River Mile 1.0 to 38.9 Segment Length: 37.9

Impaired Use(s): Aquatic Life (Partial Support), Swimming (Nonsupport)

Pollutant(s): Metals (Lead), Pathogens

Suspected Sources: Unknown, Municipal Point Sources

<u>Levisa Fork of Big Sandy River</u>
From River Mile 65.0 to 97.3

Johnson/Floyd Counties
Segment Length: 32.3

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Municipal Point Sources (Package Plants – Small Flows), Land Disposal

(Onsite Wastewater Systems – Septic Tanks and/or Straight Pipes)

<u>Levisa Fork of Big Sandy River</u> Pike County

From River Mile 116.2 to 124.6 Segment Length: 8.4

Impaired Use(s): Aquatic Life (Nonsupport), Swimming (Nonsupport)

Pollutant(s): Siltation, Pathogens

Suspected Sources: Resource Extraction, Land Disposal (Onsite Wastewater Systems – Septic

Tanks and/or Straight Pipes)

Tug Fork of Big Sandy River

Lawrence County

From River Mile 0.0 to 10.2 Segment Length: 10.2

Impaired Use(s): Swimming (Nonsupport)

Pollutant(s): Pathogens

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes)

Tug Fork of Big Sandy RiverMartin/Lawrence CountiesFrom River Mile 10.2 to 41.6Segment Length: 31.4

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Pathogens, Siltation, Organic Enrichment/Low DO

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks and/or Straight

Pipes), Resource Extraction (Surface Mining)

Little Sandy River Basin

East Fork Little Sandy River Boyd County

From River Mile 19.0 to 25.0 Segment Length: 6.0

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO
Suspected Sources: Municipal Point Sources

See Approved TMDLs. Most of the small WWTPs whose flow impacted this stream segment have been eliminated. The flow now goes to regional facilities on the Ohio River.

Newcombe Creek of Little Sandy River Elliott County

From River Mile 0.0 to 11.9 Segment Length: 11.9

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Salinity/Chlorides/TDS

Suspected Sources: Resource Extraction (Petroleum Activities)

See Approved TMDLs.

Tygarts Creek Basin

Hood Creek of Ohio River Boyd County

From River Mile 0.0 to 0.8 Segment Length: 0.8

Impaired Use(s): Swimming (Nonsupport), Aquatic Life (Nonsupport)
Pollutant(s): Pathogens, Nutrients, Organic Enrichment/Low DO

Suspected Sources: Collection System Failure

White Oak Creek of Tygarts Creek Greenup County

From River Mile 0.0 to 1.1 Segment Length: 1.1

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Habitat Alterations (Other than Flow)
Suspected Sources: Hydromodifications (Bridge Construction)

Section 2.5.5.2 2nd Priority Listings

Big Sandy River Basin

Big Sandy River of Ohio River

Lawrence County

From River Mile 0.0 to 26.8 Segment Length: 26.8

Impaired Use(s): Aquatic Life (Partial Support)
Pollutant(s): Siltation, Metals (Lead)

Suspected Sources: Resource Extraction, Hydromodification (Dredging)

Knox Creek of Tug Fork Pike County

From River Mile 0.0 to 7.6 Segment Length: 7.6 Impaired Use(s): Aquatic Life (Partial Support), Swimming (Partial Support)

Pollutant(s): Siltation, Pathogens

Suspected Sources: Unknown Source, Land Disposal (Onsite Wastewater Systems – Septic

Tanks and/or Straight Pipes)

Little Sandy River Basin

<u>Little Sandy River of Ohio River</u>
From River Mile 11.7 to 37.7

Greenup/Carter Counties
Segment Length: 26.0

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens Suspected Sources: Agriculture

In the 2002 303(d) Report the listing was included as 2nd Priority, but incorrectly showed the impairment as being 'Nonsupport' instead of 'Partial Support.' The correction has been made in this listing.

Tygarts Creek Basin

Tygarts Creek of Ohio River Greenup County

From River Mile 0.0 to 45.7 Segment Length: 45.7

Impaired Use(s): Swimming (Partial Support)

Pollutant(s): Pathogens

Suspected Sources: Agriculture, Land Disposal

In the 2002 303(d) Report the listing was included as 2nd Priority, but incorrectly showed the impairment as being 'Nonsupport' instead of 'Partial Support.'

Section 2.5.5.3 Impaired Waters Not Requiring TMDLs

Stream Segments Assessed As Impaired Based Solely on Discharge Monitoring Reports (DMRs)

Abbott Creek of Levisa ForkFloyd CountyFrom River Mile 0.0 to 2.3Segment Length: 2.3

DMR information from a Municipal Point Source indicated a swimming use impairment because of pathogens.

Section 2.5.6 Ohio River Main Stem

Section 2.5.6.1 1st Priority Listings

Note: More recent assessment information indicates that the fish consumption use is partially impaired because of PCBs and dioxin for the entire length of the Ohio River along Kentucky's border.

Ohio River Greenup County

From River Mile 317.1 to 332.5 Segment Length: 15.4 Impaired Use(s): Swimming (Nonsupport), Fish Consumption (Partial Support)

Pollutant(s): Pathogens, PCBs, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio RiverGreenup/Lewis CountiesFrom River Mile 356.5 to 361.0Segment Length: 4.5

Impaired Use(s): Swimming (Nonsupport), Fish Consumption (Partial Support), Aquatic Life

(Partial Support)

Pollutant(s): Pathogens, PCBs, Dioxin, Unknown

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

See Delisting Requests (for Aquatic Life).

Ohio River Lewis County

From River Mile 361.0 to 369.8 Segment Length: 8.8 Impaired Use(s): Swimming (Nonsupport), Fish Consumption (Partial Support)

Pollutant(s): Pathogens, PCBs, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio RiverCampbell/Kenton/Boone CountiesFrom River Mile 462.6 to 498.0Segment Length: 35.4Impaired Use(s):Swimming (Nonsupport), Fish Consumption (Partial Support)

Impaired Use(s): Swimming (Nonsupport), Fish Consu Pollutant(s): Pathogens, PCBs, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension)

Ohio River Jefferson County

From River Mile 606.8 to 609.7 Segment Length: 2.9 Impaired Use(s): Swimming (Nonsupport), Fish Consumption (Partial Support)

Pollutant(s): Pathogens, PCBs, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio River Jefferson County

From River Mile 617.6 to 629.9 Segment Length: 10.6

Impaired Use(s): Swimming (Nonsupport), Fish Consumption (Partial Support), Domestic

Water Supply (Nonsupport)

Pollutant(s): Pathogens, PCBs, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

ORSANCO carries the drinking water impairment for pathogens from 615.0 to 629.9

Ohio River Henderson County

From River Mile 791.5 to 798.4 Segment Length: 6.9 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support),

Swimming (Nonsupport)

Pollutant(s): Unknown, PCBs, Dioxin, Pathogens

Suspected Sources: Unknown, Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land

Disposal, Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

ORSANCO lists the swimming impairment from 791.5 to 797.3 in the 2004 305(b) report.

Ohio RiverHenderson/Union CountiesFrom River Mile 798.4 to 846.0Segment Length: 54.5Impaired Use(s):Swimming (Nonsupport), Fish Consumption (Partial Support)

Pollutant(s): Pathogens, PCBs, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

The swimming impairment is a carry-over from the 2002 303(d) listings. ORSANCO called this reach not assessed in the 2004 305(b) report.

Section 2.5.6.2 2nd Priority Listings

Note: Chlordane was previously delisted for the entire length of the Ohio River along Kentucky's border. However, fish consumption use is still partially impaired because of PCBs and dioxin.

Ohio River Greenup County

From River Mile 332.5 to 341.0 Segment Length: 8.5 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio River Greenup County

From River Mile 341.0 to 356.5 Segment Length: 15.5 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio River Lewis County

From River Mile 369.8 to 395.1 Segment Length: 25.3 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio River Lewis County

From River Mile 395.1 to 436.2 Segment Length: 41.1

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs, Dioxin

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension).

Ohio River Bracken/Pendleton/Campbell Counties

From River Mile 436.2 to 462.6 Segment Length: 26.4 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension). Combined Sewer Overflows, Urban Runoff/Storm Sewers,

Land Disposal, agriculture, Municipal Point Sources.

See Delisting Requests for pathogens.

Ohio River Boone Counties

From River Mile 498.0 to 510.0 Segment Length: 12.0 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension). Combined Sewer Overflows, Urban Runoff/Storm Sewers,

Land Disposal, agriculture, Municipal Point Sources.

See Delisting Requests for pathogens.

Ohio RiverBoone/Gallatin CountiesFrom River Mile 510.0 to 523.4Segment Length: 13.4

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs, Dioxin

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension).

Ohio RiverGallatin/Carroll CountiesFrom River Mile 523.4 to 538.5Segment Length: 15.1Impaired Use(s):Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio River Carroll County

From River Mile 538.5 to 545.8 Segment Length: 7.3

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension).

Ohio River Carroll/Trimble/Oldham/Jefferson

From River Mile 545.8 to 553.6 Counties

Impaired Use(s): Fish Consumption (Partial Support), Segment Length: 7.8

Swimming (Partial Support), Aquatic Life (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

See Delisting Requests for Aquatic Life and Swimming.

Ohio RiverCarroll/Trimble CountiesFrom River Mile 553.6 to 567.6Segment Length: 4.0

Impaired Use(s): Swimming (Partial Support), Fish Consumption (Partial Support), Aquatic

Life (Partial Support)

Pollutant(s): Pathogens, PCBs, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

See Delisting Requests for Aquatic Life.

Ohio River Trimble/Oldham/Jefferson Counties

From River Mile 567.6 to 606.8 Segment Length: 39.2

Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support),

Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

See Delisting Requests for Aquatic Life and Swimming.

Ohio River Jefferson County

From River Mile 609.7 to 617.6 Segment Length: 12.5 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

See Delisting Requests for Swimming. ORSANCO carries drinking water impairment from 615.0 to 629.9 for pathogens.

Ohio River Hardin/Meade/Breckinridge/Hancock

From River Mile 629.9 to 730.2 Counties

Impaired Use(s): Fish Consumption (Partial Support) Segment Length: 90.6

Pollutant(s): PCBs, Dioxin

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension).

Ohio River Hancock County

From River Mile 730.2 to 731.5 Segment Length: 1.3 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support)

Pollutant(s): Unknown, PCBs, Dioxin

Suspected Sources: Unknown, Land Disposal, Industrial Point Sources, Contaminated Sediments

(Sediment Resuspension).

Ohio River Hancock/Daviess/Henderson Counties

From River Mile 731.5 to 776.1 Segment Length: 55.4

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs, Dioxin

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension).

Ohio River Henderson County

From River Mile 776.1 to 788.1 Segment Length: 12.0 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

The swimming impairment is a carry-over from the 2002 303(d) listings. ORSANCO called it not assessed in the 2004 305(b) report.

Ohio River Henderson County

From River Mile 788.1 to 791.5 Segment Length: 1.3 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support),

Swimming (Partial Support)

Pollutant(s): Unknown, PCBs, Dioxin, Pathogens

Suspected Sources: Unknown, Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land

Disposal, Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

The swimming impairment is a carry-over from the 2002 303(d) listings. ORSANCO called this reach not assessed in the 2004 305(b) report.

Ohio River Union/Crittenden/Livingston Counties

From River Mile 846.0 to 918.5 Segment Length: 70.5

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs, Dioxin, Mercury

Suspected Sources: Land Disposal, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension), Atmospheric Deposition

Ohio River Livingston County

From River Mile 918.5 to 920.4 Segment Length: 1.9

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs, Dioxin

Suspected Sources: Land Disposal, Industrial Point Sources, Contaminated Sediments (Sediment

Resuspension).

Ohio RiverLivingston/McCracken CountiesFrom River Mile 920.4 to 934.5Segment Length: 14.1Impaired Use(s):Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Pathogens, Dioxin

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

The listing for swimming is a carry-over from previous listings. ORSANCO's 2004 303(d) report calls this reach not assessed for swimming use.

Ohio River McCracken County

From River Mile 934.5 to 939.8 Segment Length: 5.3 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Mercury, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

The listing for swimming is a carry-over from previous listings. ORSANCO's 2004 303(d) report calls this reach not assessed for swimming use.

Ohio River McCracken County

From River Mile 939.8 to 941.1 Segment Length: 2.3 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support),

Swimming (Partial Support)

Pollutant(s): Unknown, PCBs, Dioxin, Mercury, Pathogens

Suspected Sources: Unknown, Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land

Disposal, Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio River From River Mile 941.1 to 976.8 Segment Length: 35.7 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Mercury, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

The listing for swimming is a carry-over from previous listings. ORSANCO's 2004 303(d) report calls this reach not assessed for swimming use.

Ohio River Ballard County

From River Mile 976.8 to 978.1 Segment Length: 1.3 Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support),

Swimming (Partial Support)

Pollutant(s): Unknown, PCBs, Dioxin, Mercury, Pathogens

Suspected Sources: Unknown, Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land

Disposal, Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

Ohio River Ballard County

From River Mile 978.1 to 981.0 Segment Length: 2.9 Impaired Use(s): Fish Consumption (Partial Support), Swimming (Partial Support)

Pollutant(s): PCBs, Dioxin, Mercury, Pathogens

Suspected Sources: Combined Sewer Overflows, Urban Runoff/Storm Sewers, Land Disposal,

Agriculture, Municipal Point Sources, Industrial Point Sources,

Contaminated Sediments (Sediment Resuspension).

The listing for swimming is a carry-over from previous listings. ORSANCO's 2004 303(d) report calls this reach not assessed for swimming use.

Section 2.5.7 Lakes and Reservoirs

Section 2.5.7.1 1st Priority Listings

Kentucky River Basin Unit

Kentucky River Basin

Herrington Lake Garrard/Boyle/Mercer Counties

Acres: 2,940

Impaired Use(s): Aquatic Life (Nonsupport), Fish Consumption (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Nutrients, Mercury

Suspected Sources: Municipal Point Sources, Agriculture, Land Disposal (Onsite Wastewater

Systems - Septic Tanks), Atmospheric Deposition

See TMDLs Under Development.

Panbowl Lake Breathitt County

Acres: 98

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Land Disposal, Septage Disposal, Internal Nutrient Cycling

Salt/Licking River Basin Unit

Salt River Basin

Guist Creek Lake Shelby County

Acres: 317

Impaired Use(s): Aquatic Life (Nonsupport), Drinking Water Supply (Partial Support),

Fish Consumption (Partial Support)

Pollutant(s): Nutrients, Metals (Manganese and Mercury), Organic Enrichment/Low DO

Suspected Sources: Agriculture, Land Disposal (Onsite Wastewater Systems – Septic Tanks),

Atmospheric Deposition, and Natural Causes

This listing for aquatic life (originally partial support) and drinking water supply because of nutrients and metals (manganese) is from the 1998 303(d) Report. Atmoshperic deposition is the source of mercury for the fish consumption impairment and natural causes being manganese release form the anoxic sediments that cause drinking water impairment after the lake mixes in the fall. The latest assessment information indicates that Guist Creek is now in nonsupport of aquatic life, and shows that fish consumption (metals – mercury) is also impaired.

<u>Taylorsville Lake</u>
Spencer County
Acres: 3,050

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients

Suspected Sources: Agriculture, High Phosphorus Content in Soils

See Approved TMDLs.

Ohio River Basin

<u>Jericho Lake</u>
Henry County
Acres: 137

Impaired Use(s): Aquatic Life (Nonsupport)

Pollutant(s): Nutrients Suspected Sources: Agriculture

This listing replaces the one that was in 1998 303(d) Report. The latest assessment information indicates that the lake is now in nonsupport of the aquatic life designated use instead of partial support.

Tennessee/Mississippi/Cumberland River Basin Unit

Mississippi River Basin

Swan Pond Ballard County

Acres: 193

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO
Suspected Sources: Agriculture, Natural Sources

Upper Cumberland River Basin

<u>Corbin City Reservoir</u>

Laurel County
Acres: 139

Impaired Use(s): Drinking Water Supply (Nonsupport), Aquatic Life (Partial Support)
Pollutant(s): Nutrients, Organic Enrichment/Low DO, Taste and Odor, Algal

Growth/Chlorophyll_a

Suspected Sources: Municipal Point Sources (Major Municipal Point Sources), Agriculture,

Internal Nutrient Cycling

The listing of the impairment of drinking water supply because of nutrients is from the 1998 303(d) Report. More recent information shows that the aquatic life designated use is also impaired because of organic enrichment/low DO and algal growth/chlorophyll_a. Also, Taste and Odor is a cause for Drinking Water Supply impairment. Some data collection has been done in the watershed to define what areas of the watershed are contributing most to the impairments.

Lower Cumberland River Basin

Hematite Lake County Acres: 90

Impaired Use(s): Aquatic Life (Nonsupport)
Pollutant(s): Organic Enrichment/Low DO

Suspected Sources: Natural Sources

Section 2.5.7.2 2nd Priority Listings

Kentucky River Basin Unit

Impaired Use(s):

Kentucky River Basin

Buckhorn Lake Perry County
Acres: 1,230

Impaired Use(s): Secondary Contact Recreation (Partial Support), Aquatic Life (Partial

Support)

Pollutant(s): Suspended Solids, Siltation, Organic Enrichment/Low DO Suspected Sources: Municipal Point Sources, Agriculture, Resource Extraction

This listing for secondary contact recreation due to suspended solids is from the 1998 303(d) Report. The most recent assessment also indicates an impairment of the aquatic life use because of siltation and organic enrichment/Low DO.

<u>Carr Fork Lake (Reservoir)</u>

Knott County
Acres: 710

Secondary Contact Recreation (Partial Support), Aquatic Life (Partial

Support)

Pollutant(s): Suspended Solids, Siltation, Organic Enrichment/Low DO Suspected Sources: Resource Extraction (Surface Mining), Unknown Source

The listing for secondary contact recreation due to suspended solids is from the 1998 303(d) Report. More recent information shows that the aquatic life use is impaired due to siltation and organic enrichment/Low DO. Suspected causes are Resource Extraction and unknown source respectively.

Elmer Davis Lake Owen County

Acres: 149

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Agriculture

General Butler State Park Lake

Carroll County
Acres: 29

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Organic Enrichment/Low DO, Nutrients

Suspected Sources: Internal Nutrient Cycling

More recent information (2003) indicates the lake meets designated uses.

Stanford (City Lake) Reservoir Lincoln County

Acres: 43

Impaired Use(s): Drinking Water Supply (Partial Support)

Pollutant(s): Taste and Odor, Nutrients

Suspected Sources: Unknown

Wilgreen Lake Madison County

Acres: 169

Impaired Use(s): Aquatic Life (Partial Support), Secondary Contact Recreation (Partial

Support)

Pollutant(s): Nutrients

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks)

Salt/Licking River Basin Unit

Licking River Basin

<u>Cave Run Lake</u> Bath/Rowan/Morgan/Menifee Counties

Acres: 8,270

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Metals (Mercury)

Suspected Sources: Atmospheric Deposition

<u>Doe Run Lake</u> Kenton County

Acres: 51

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients Suspected Sources: Unknown

Greenbriar Lake Montgomery County

Acres: 66

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients, Organic Enrichment/Low DO

Suspected Sources: Agriculture

Kincaid Lake Pendleton County

Acres: 183

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients
Suspected Sources: Unknown

Sand Lick Creek Lake Fleming County

Acres: 74

Impaired Use(s): Aquatic Life (Partial Support), Secondary Contact Recreation (Partial

Support)

Pollutant(s): Nutrients, Shallow Lake Basin, Organic Enrichment/Low DO

Suspected Sources: Agriculture, Internal Nutrient Cycling

Salt River Basin

<u>Lake Shelby</u> Shelby County Acres: 17

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Agriculture, Internal Nutrient Cycling

Lake Shelby has been drained (late 2003) and dredged to remove excess sediment. Therefore, the assessment information that was used to produced this listing is no longer applicable. An assessment is scheduled for the lake for 2004. However, because the lake will have just recently been filled, an assessment may not be done.

Marion County Sportman Lake Marion County

Acres: 21

Impaired Use(s): Recreation (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Lake Fertilization

According to the April, 2003 monthly report by KDFW the lake was fertilized during monitoring.

McNeely Lake Jefferson County

Acres: 51

Impaired Use(s): Aquatic Life (Partial Support), Fish Consumption (Partial Support)

Pollutant(s): Nutrients, Metals (Mercury)

Suspected Sources: Internal Nutrient Cycling, Atmospheric Deposition

The listing for the aquatic life impairment due to nutrients is from the 1998 303(d) Report. More recent information indicates that the lake is also impaired for fish consumption due to mercury from air deposition.

Tennessee/Mississippi/Cumberland River Basin Unit

Ohio River Basin

Metropolis Lake McCracken County

Acres: 36

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Metals (Mercury)

Suspected Sources: Atmospheric Deposition

Upper Cumberland River Basin

<u>Cranks Creek Lake</u> Harlan County

Acres: 219

Impaired Use(s): Swimming (Partial Support), Secondary Contact Recreation (Partial

Support), Aquatic Life (Partial Support)

Pollutant(s): pH

Suspected Sources: Resource Extraction (Abandoned Mining)

The latest assessment information indicates that the pH impairment occurred only during the fall period and only in the deepest portions of the lake.

<u>Lake Cumberland</u> Clinton/Pulaski/Russell/Wayne Counties

Acres: 50,250

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Metals (Mercury)

Suspected Sources: Atmospheric Deposition

Wood Creek Lake Laurel County

Acres: 672

Impaired Use(s): Drinking Water Supply (Partial Support)

Pollutant(s): Taste and Odor, Nutrients

Suspected Sources: Land Disposal (Onsite Wastewater Systems – Septic Tanks)

Green/Tradewater River Basin Unit

Green River Basin

Barren River Lake (Reservoir)

Allan/Barren Counties

Acres: 10,000

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Mercury

Suspected Sources: Atmospheric Deposition

<u>Campbellsville City Lake (Reservoir)</u>
Taylor County

Acres: 63

Impaired Use(s): Aquatic Life (Partial Support), Secondary Contact Recreation (Partial

Support)

Pollutant(s): Shallow Lake Basin

Suspected Sources: Agriculture, Natural Sources

Caneyville (City) Reservoir Grayson County

Acres: 75

Impaired Use(s): Secondary Contact Recreation. Drinking Water Supply.

(Partial Support)

Pollutant(s): Nutrients, Shallow Lake Basin

Suspected Sources: Natural Sources

This listing is from the 1998 303(d) Report. The City of Caneyville no longer uses the Caneyville Reservoir for water supply. The City purchases water from the Grayson County Water District, which has just recently completed a new facility which uses Rough River Lake as the raw water source.

<u>Grapevine Lake</u> Hopkins County

Acres: 50

Impaired Use(s): Drinking Water Supply (Partial Support)

Pollutant(s): Nutrients Suspected Sources: Unknown

This listing is from the 1998 303(d) Report. The lake is no longer used for water supply by the City of Madisonville, which now gets raw water from the Green River.

Green River Lake Taylor/Adair Counties

Acres: 8,210

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): PCBs, Mercury

Suspected Sources: Industrial Point Source, Atmospheric Deposition

This listing for fish consumption due to Priority Organics (PCBs) is from the 1998 303(d) Report. More recent fish tissue data indicates that the lake is also impaired for fish consumption because of mercury from atmospheric deposition.

<u>Luzerne Lake</u> Muhlenburg County

Acres: 55

Impaired Use(s): Drinking Water Supply (Partial Support)

Pollutant(s): Nutrients Suspected Sources: Unknown

Rough River Lake Breckinridge/Grayson Counties

Acres: 5.100

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Mercury
Suspected Sources: Unknown

Salem Lake Larue County

Acres: 99

Impaired Use(s): Secondary Contact Recreation (Partial Support)
Pollutant(s): Shallow Lake Basin, Other Habitat Alterations

Suspected Sources: Agriculture

Spa Lake Logan County

Acres: 240

Impaired Use(s): Secondary Contact Recreation (Partial

Support)

Pollutant(s): Algae Growth, Shallow Lake Basin, Other Habitat Alterations

Suspected Sources: Agriculture

Ohio River Basin

Scenic Lake Henderson County

Acres: 18

Impaired Use(s): Aquatic Life (Partial Support)

Pollutant(s): Nutrients

Suspected Sources: Internal Nutrient Cycling

Tradewater River Basin

<u>Lake Pewee</u> Hopkins County

Acres: 360

Impaired Use(s): Drinking Water Supply (Partial Support)

Pollutant(s): Nutrients Suspected Sources: Agriculture

Big Sandy/Little Sandy River Basin Unit

Big Sandy River Basin

<u>Dewey Lake</u> Floyd County

Acres: 1,100

Impaired Use(s): Secondary Contact Recreation (Partial Support)

Pollutant(s): Suspended Solids

Suspected Sources: Resource Extraction (Surface Mining)

<u>Paintsville Reservoir</u> Johnson/Morgan Counties

Acres: 1,139

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Mercury

Suspected Sources: Atmospheric Deposition

Little Sandy River Basin

Grayson Lake Carter/Elliot Counties

Acres: 1,512

Impaired Use(s): Fish Consumption (Partial Support)

Pollutant(s): Mercury

Suspected Sources: Atmospheric Deposition